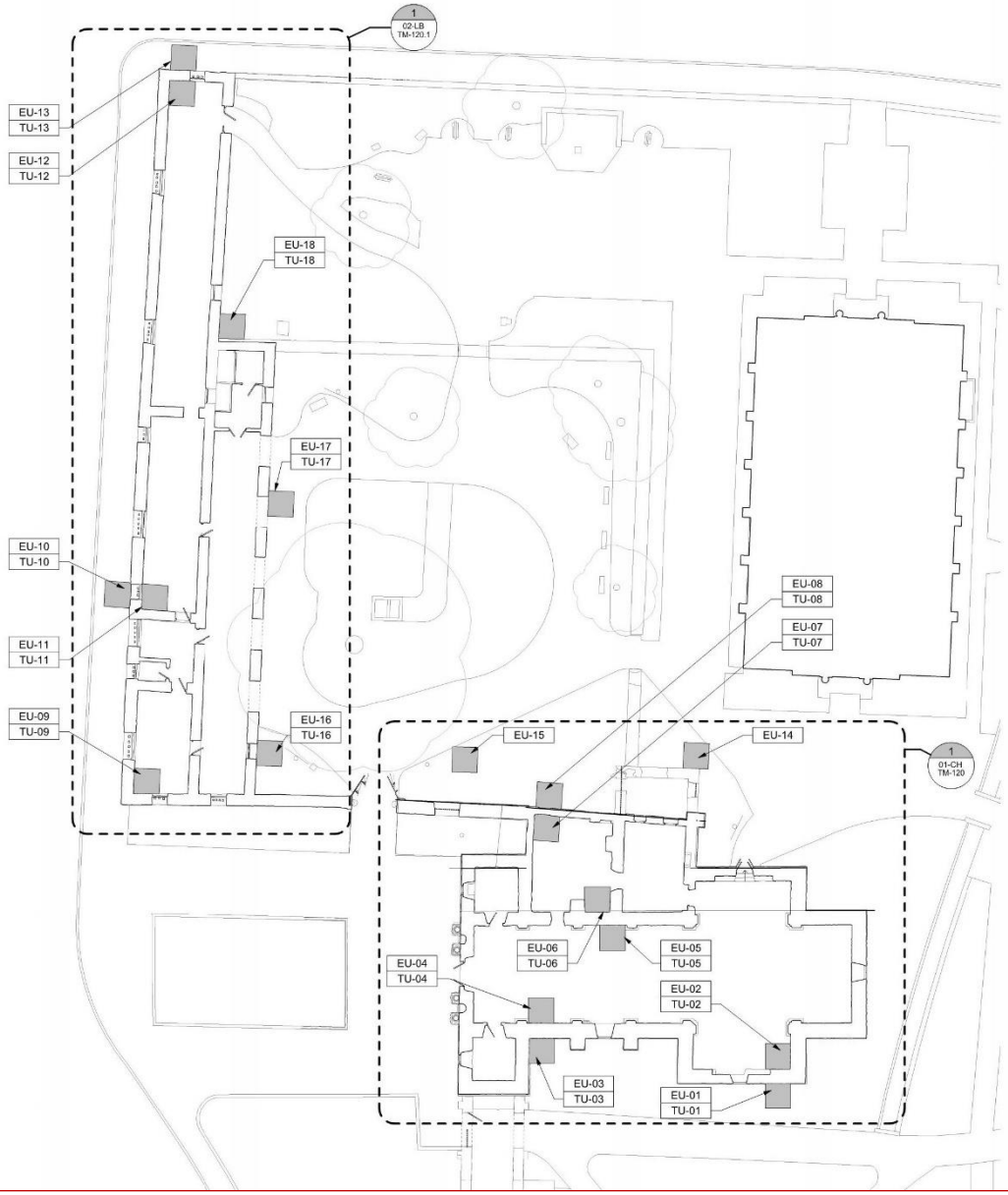
Tuesday, November 19, 2019

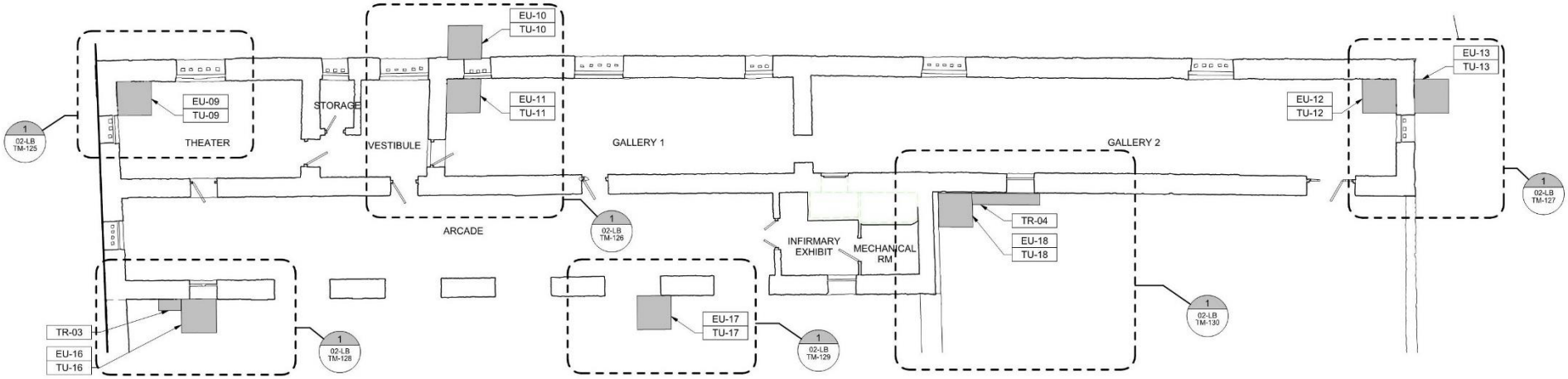
PDP
PRESERVATION DESIGN PARTNERSHIP, LLC

FORD
POWELL
&CARSON
Architects & Planners, Inc.

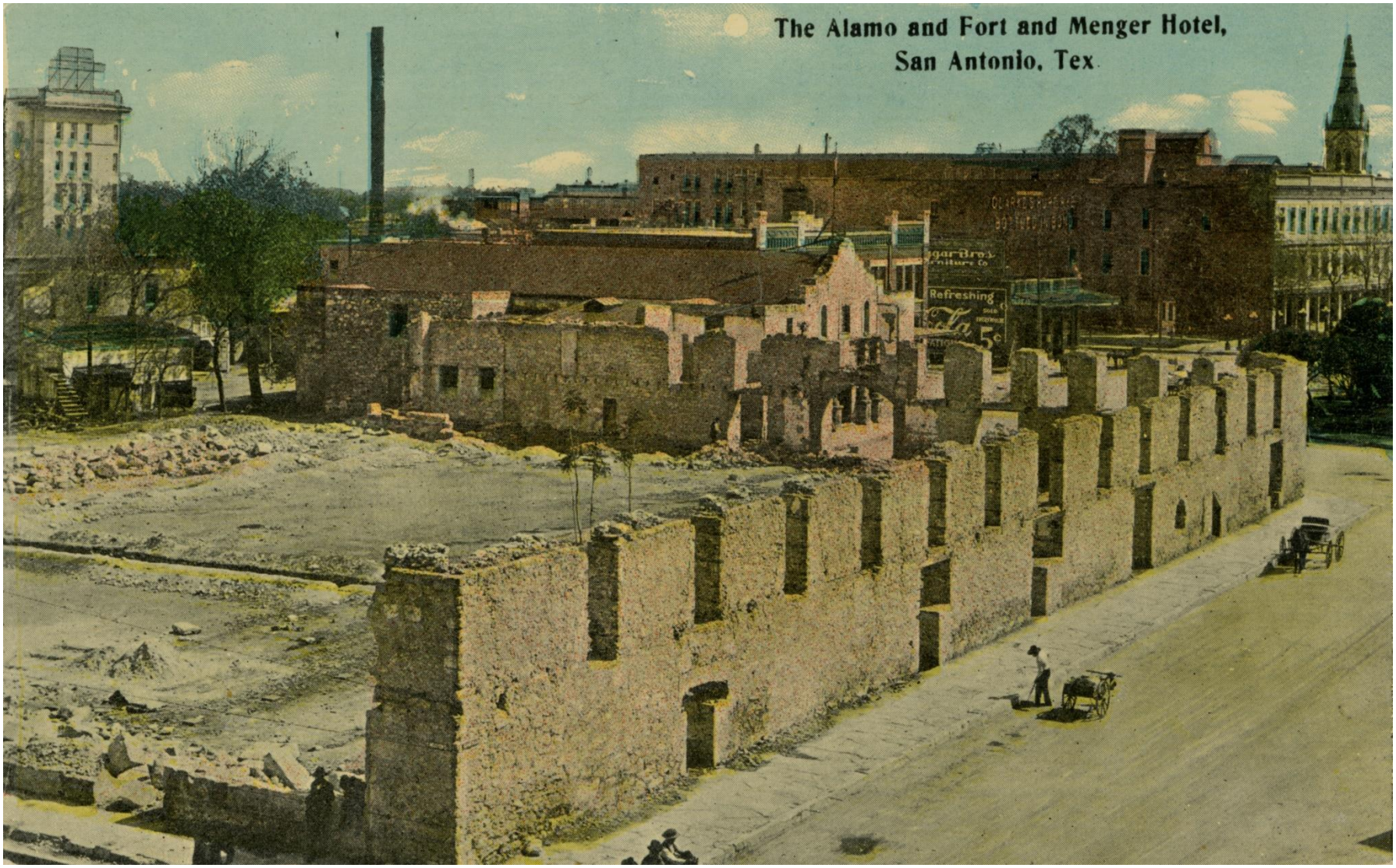
Alamo Excavation and Test Units



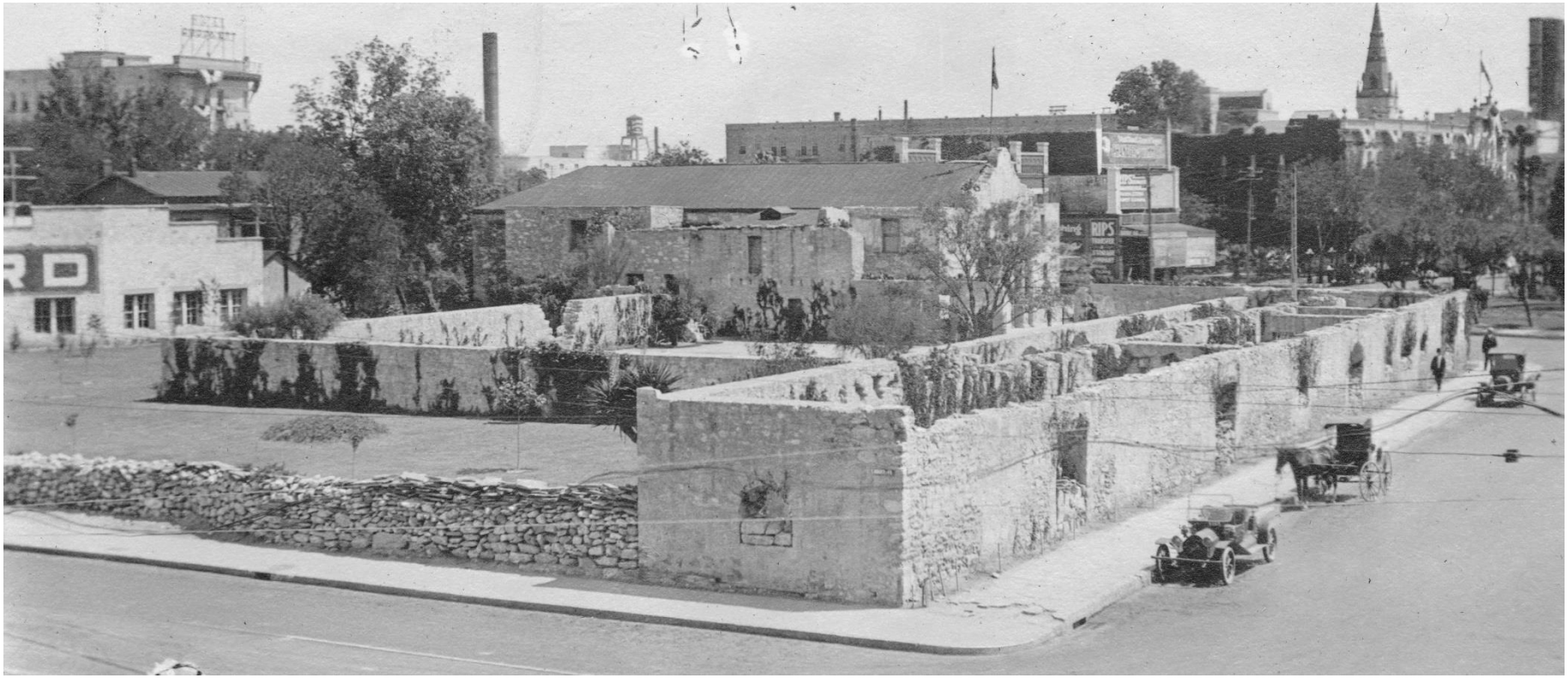
Long Barrack - Excavation Units



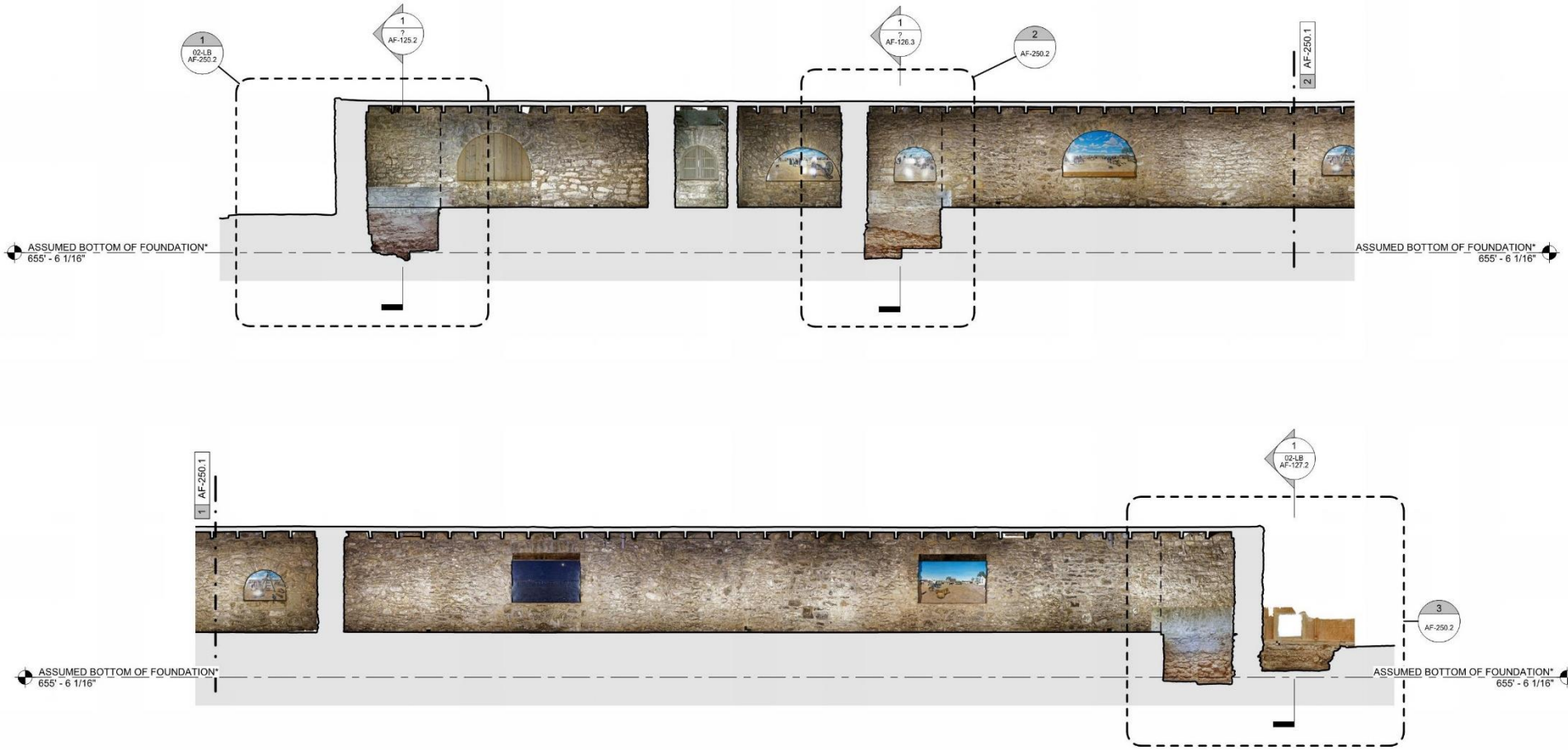
Long Barrack – 1912



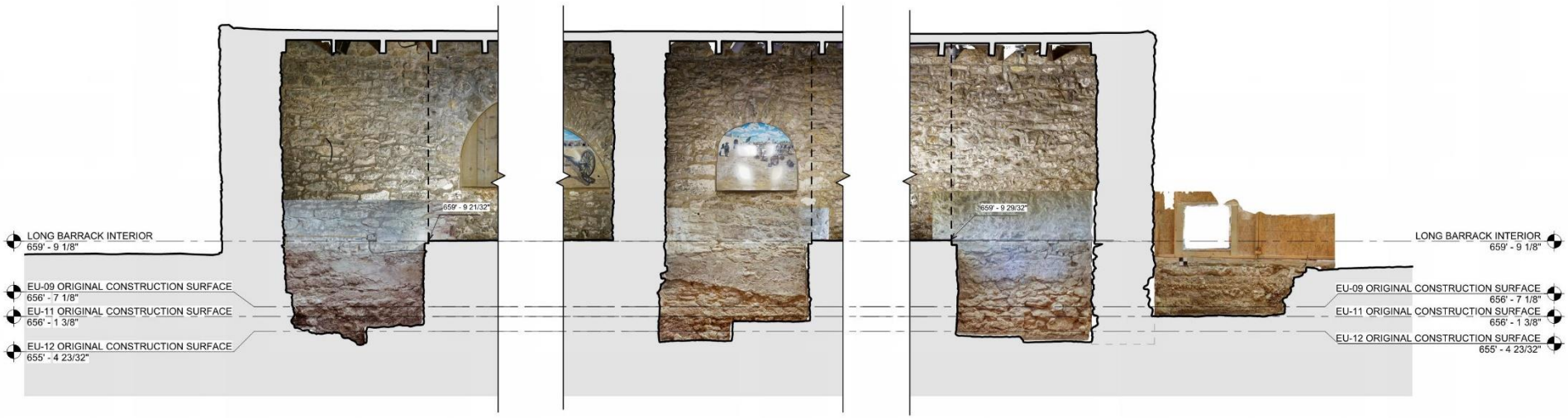
Long Barrack – 1913



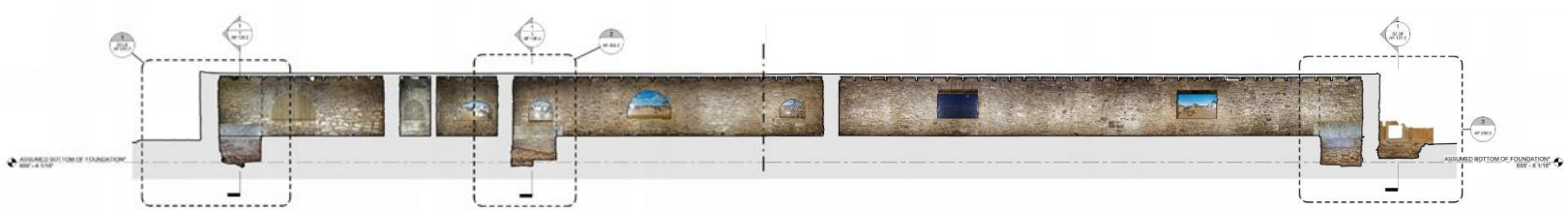
Long Barrack – Section Looking West



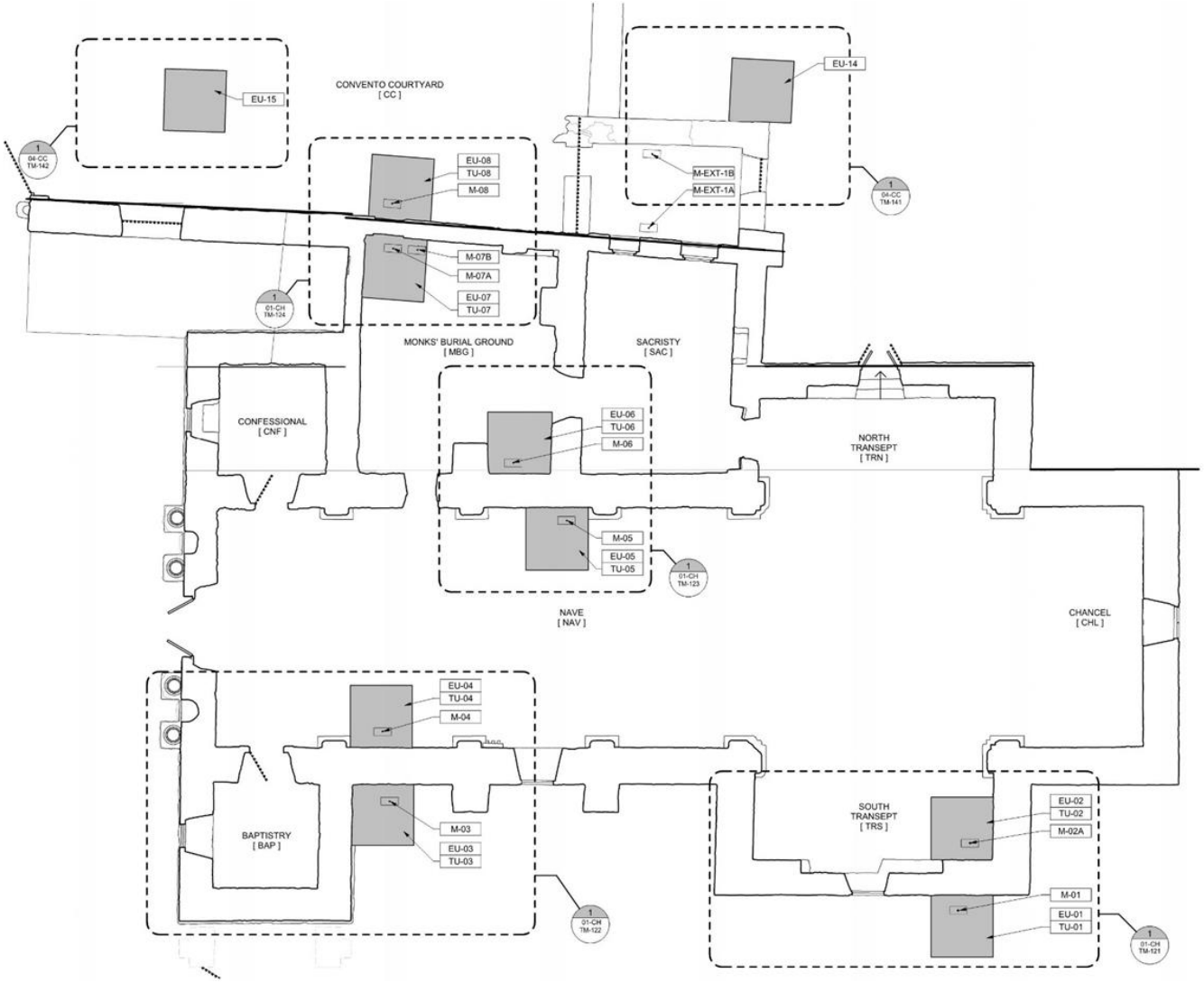
Long Barrack – Composite Section Looking West



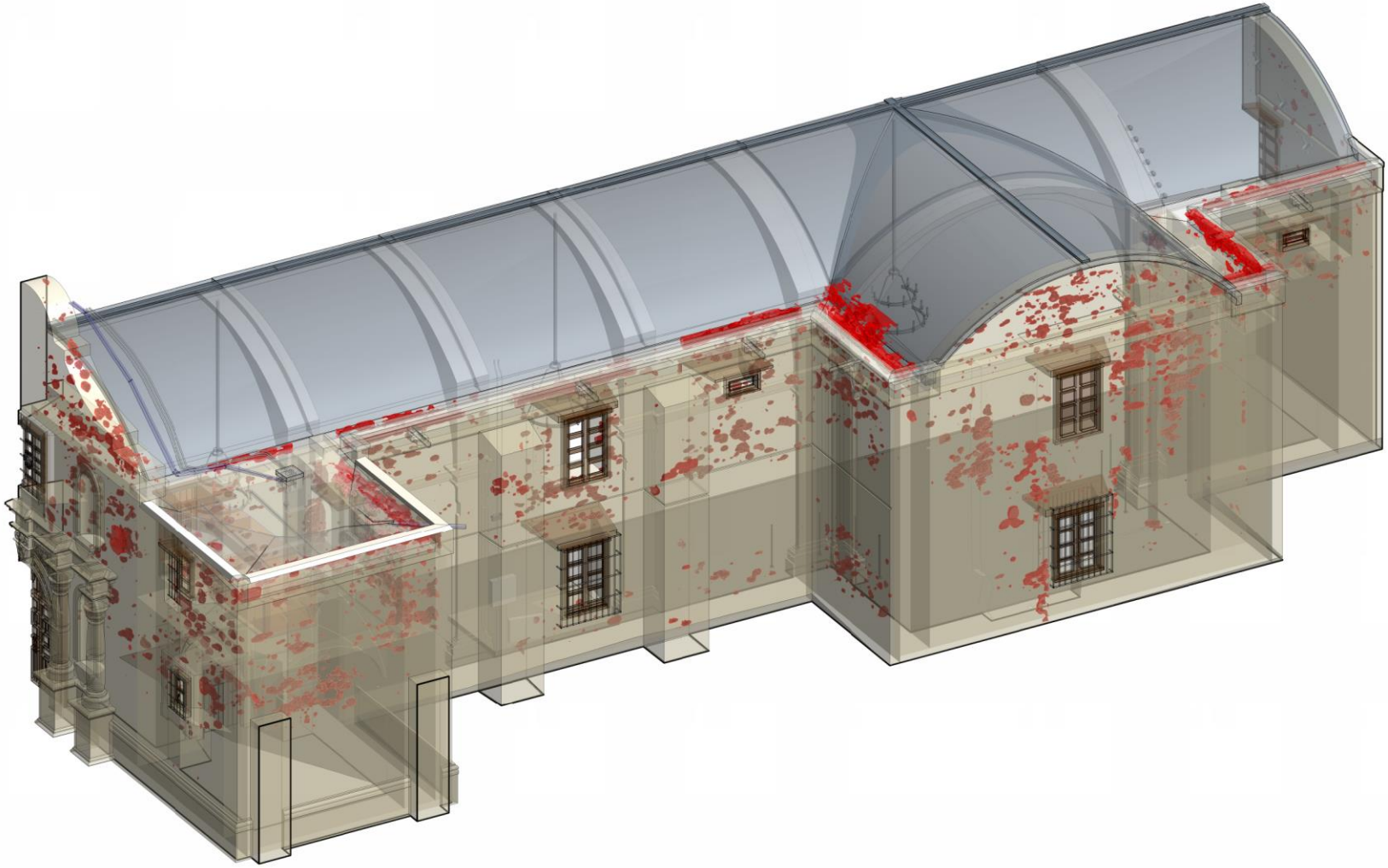
EU-9 **EU-11** **EU-12** **EU-13**



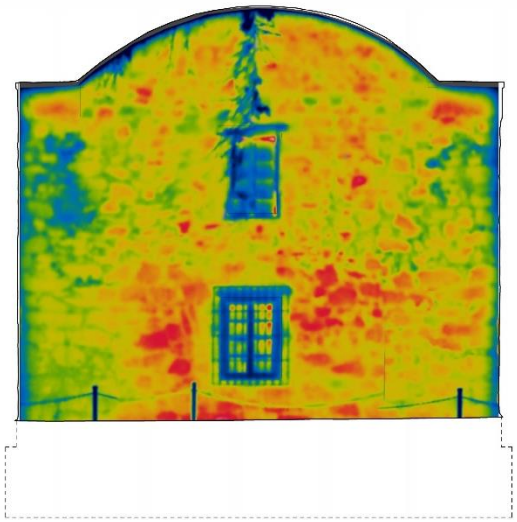
Church – Excavation Units



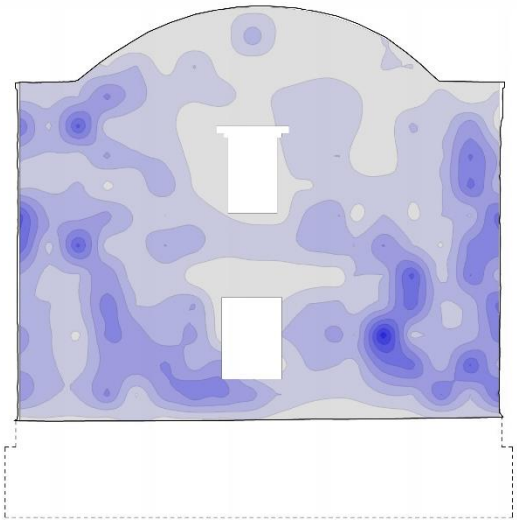
Church - 3-D with Void Mapping



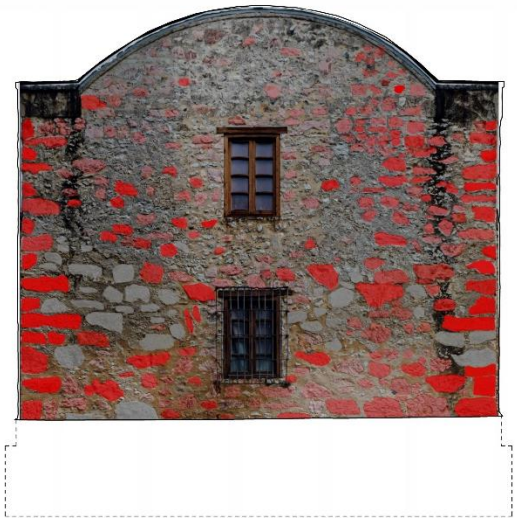
Church – NDE Mapping



Infrared Thermography



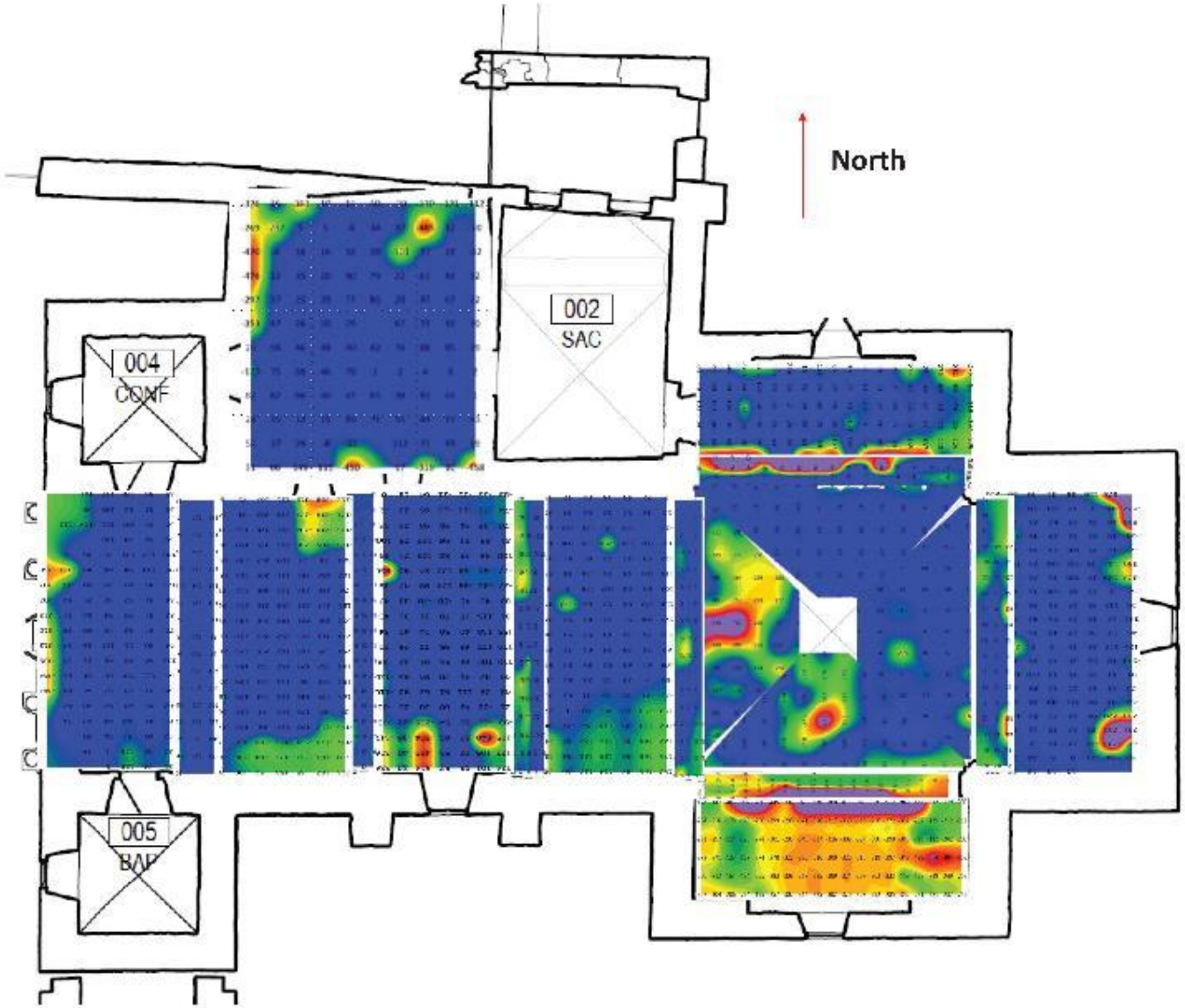
Moisture Mapping



Stone Depth Mapping

Void Mapping

Church – Concrete Roof Condition



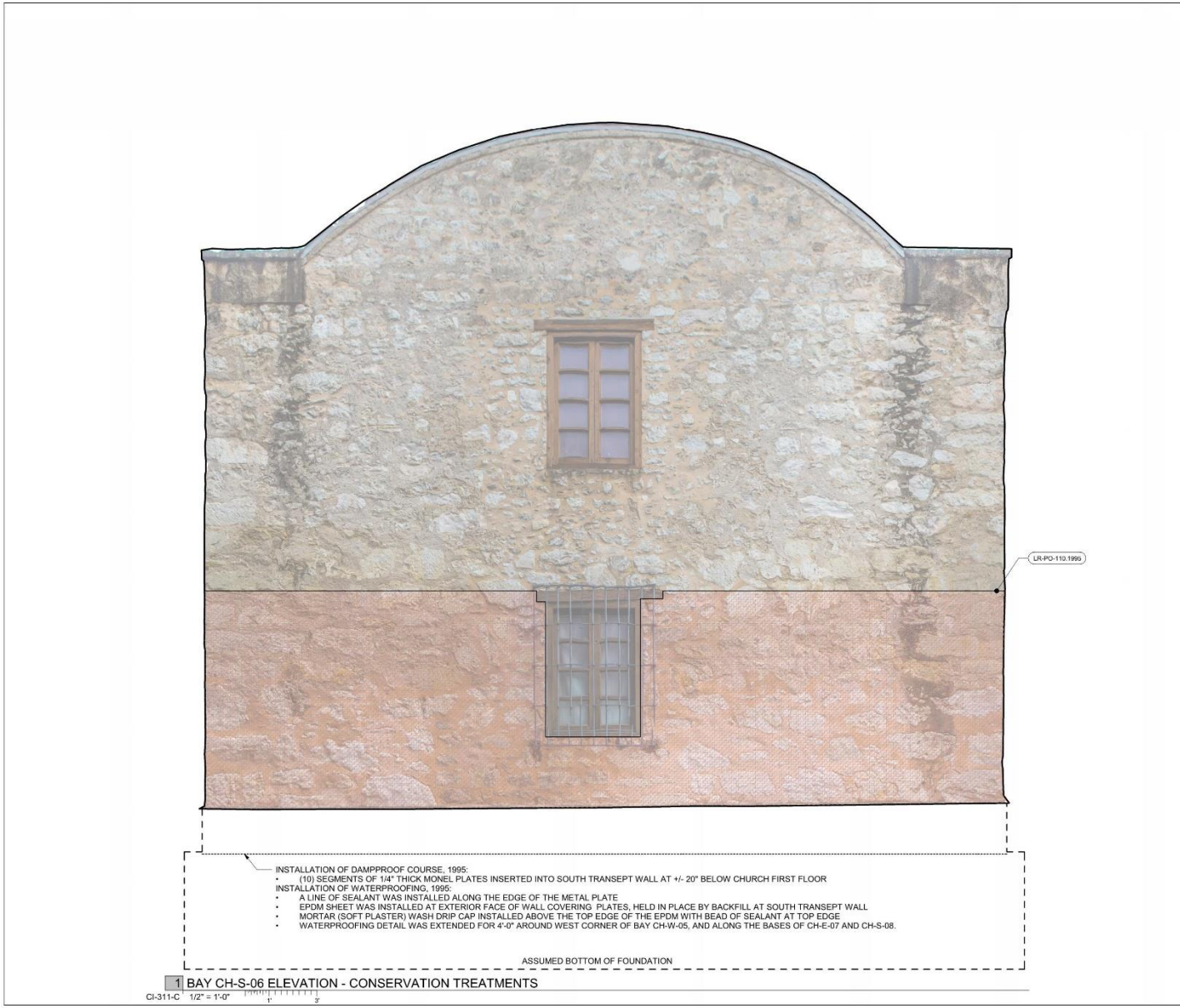
Layers – As-Found Conditions

Church – Monitoring

Layers – Building Evolution

Layers – Applied Finishes

Layers – Masonry Conservation



KEY - CONSERVATION TREATMENTS - MASONRY

MATERIAL ABBR. — CONSERVATION DATE OF REPORT
LO-DU-50.1998
TREATMENT ABBR. — TREATMENT CODE

MATERIAL

	LO	LIMESTONE - ORNAMENTAL STONE
	LR	LIMESTONE - RUBBLE / FIELD STONE
	CO	CONCRETE

TREATMENT TYPE

HATCH	ABBR.	CODE	DESCRIPTION
	CP	01-09	CRACK REPAIRS
	JT	10-19	JOINT REPAIRS
	VW	20-29	VOID INFILLS
	PA	30-39	PATCH REPAIRS
	TL	40-49	TOOLING REPAIRS
	PN	50-59	PINNED REPAIRS
	DU	60-69	DUTCHMAN REPAIRS
	UR	70-79	UNIT REPLACEMENTS
	EM	80-89	REMOVAL OF EMBED. METAL
	FL	90-99	FLASHINGS / COATINGS
	CL	100-109	CLEANING
	PO	110-119	POULTICING
	RP	120-129	RE-POINTING

MASONRY NOTES - CONSERVATION TREATMENTS

CRACK REPAIRS
01 CRACK REPAIR

JOINT AND VOID REPAIRS
10 GROUT INJECTED INTO OPEN JOINT
11 ADDITION OF SEALANT AT JOINT
12 REMOVAL OF SEALANT AT JOINT
13 LEAD JOINT PROTECTOR
20 INJECTION OF LIME MORTAR FILL

PATCH REPAIRS
30 CEMENTITIOUS PATCH
31 SOFT PLASTER WASH
32 PURE LIME (NHL) BASED PATCH
33 FACE ANCHORING W/ PINS & ACRYLOID B-72
34 ADHESION W/ ACRYLOID B-72 & PATCH(ES)

TOOLING REPAIRS
40 REMOVAL OF LOOSE OR FRIABLE STONE
41 RE-TOOLING

PINNED REPAIRS
50 PINNED STONE FRAGMENT W/ MORTAR
51 PINNED STONE FRAGMENT(S) W/ EPOXY
52 PINNED STONE FRAGMENT W/ ACRYLOID B-72

STONE DUTCHMAN REPAIRS
60 FLAT DUTCHMAN REPAIR
61 PROFILED DUTCHMAN REPAIR
62 CARVED DUTCHMAN REPAIR

STONE REPLACEMENT / FULL-FACE DUTCHMAN REPAIRS
70 REPLACEMENT STONE UNIT
71 REMOVAL AND RE-INSTALLATION OF UNIT
72 INSERTION OF STONE
73 FULL-FACE DUTCHMAN

REMOVAL OF EMBEDDED METAL
80 REMOVAL OF METAL FASTENER

FLASHINGS / COATINGS
90 METAL FLASHING
91 FIBER-REINFORCED CEMENTITIOUS COATING
92 CLEAR SILICONE OVER CEMENTITIOUS WASH

CLEANING
100 BIOLOGICAL GROWTH REMOVAL- WATER ONLY
101 BIO. GROWTH REMOVAL-25% CLOROX BIOCIDE
102 BIO. GROWTH REMOVAL - D/2 BIOCIDE
103 REMOVAL OF COATINGS - LACQUER THINNER

POULTICING
110 APPLICATION OF POULTICE

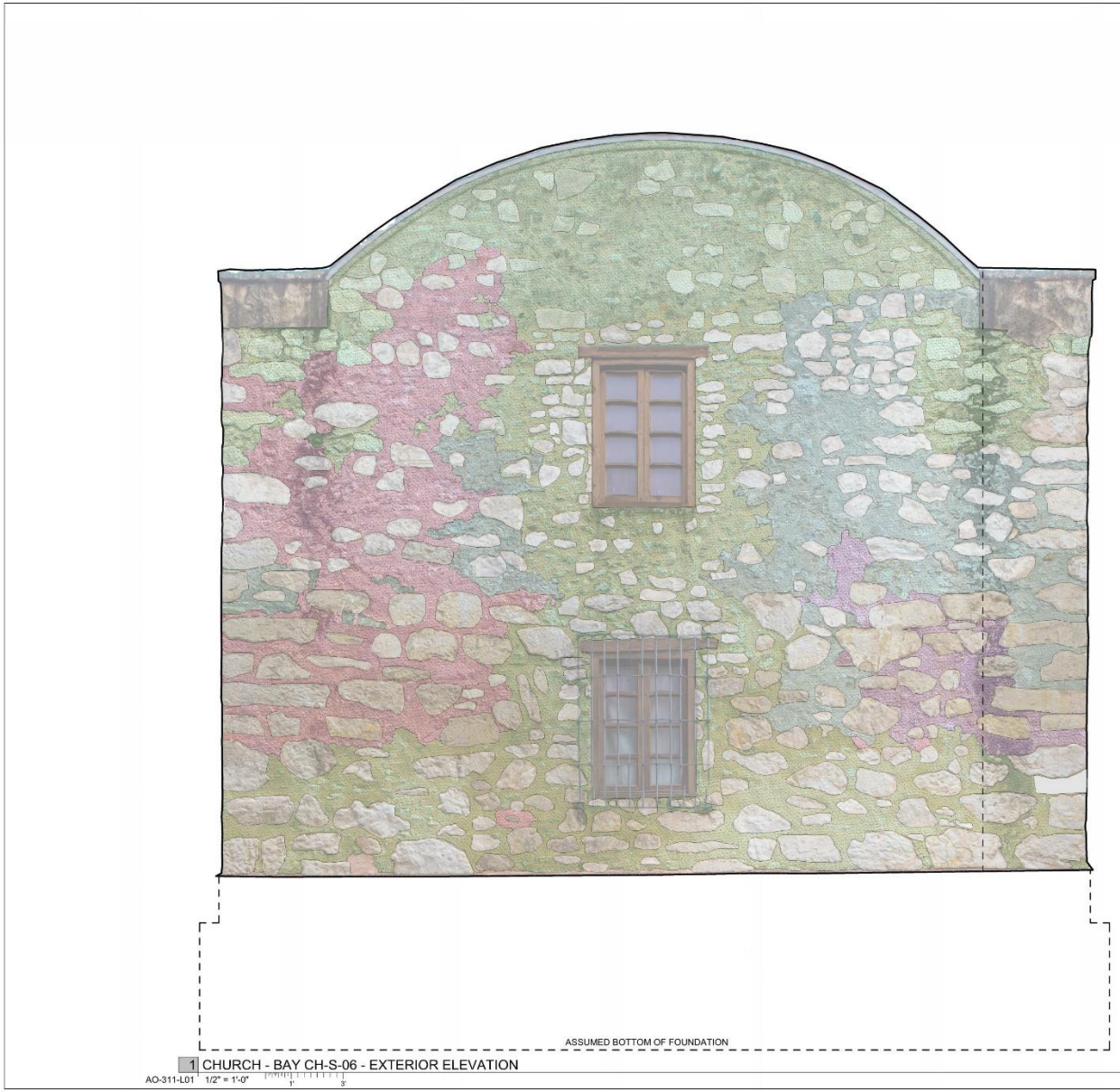
RE-POINTING
120

KEY PLAN: CHURCH

Layers – Mortar Conservation

Layers – Masonry Types and Conditions

Layers – Mortar Types



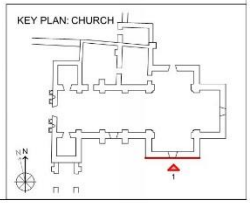
KEY - MORTAR TYPE ANNOTATION

M01	OFF-WHITE/GREY COLOR. AGGREGATE: FINE-TO-NONE, SMALL CLUMPS OF LIME; COVERED WITH CEMENTITIOUS MATERIAL OFTEN APPLIED OVER STONE AND MORTAR.
M02	COARSE STUCCO
M03	PALE GREY COLOR. AGGREGATE: FINE W/ ROUNDED EDGES, SMALL CLUMPS OF UNMIXED LIME; LAYERED DEEPER OR BELOW OTHER MORTARS
M04	BROWN COLOR ROUGH COAT TYPICALLY ADJACENT TO PLASTER; FINE GRAIN SAND
M05	BEIGE COLOR. AGGREGATE: MEDIUM-TO-LARGE WITH ROUNDED EDGES, VARYING SIZES AND COLORS; HIGH AGGREGATE TO SAND RATIO; COARSE
M06	LIGHT BEIGE COLOR. AGGREGATE: SMALL-TO-MEDIUM SIZES IN LIGHTER COLORS THAN TYPE 5; COARSE
M07	DARK BEIGE/GREY COLOR. AGGREGATE: SMALL-TO-MEDIUM WITH ROUNDED EDGES
M08	DARK BROWN-GREY COLOR. AGGREGATE: FINE SAND, SIMILAR TO PATCHING MORTAR
M09	LIGHT BEIGE COLOR. AGGREGATE: FINE-TO-SMALL
M10	LIGHT BEIGE-ROSE COLOR. AGGREGATE: MEDIUM-TO-LARGE SIZES IN DARK COLORS (BLACK) WITH SHARP EDGES
M11	ROSE-ORANGE COLOR. AGGREGATE: SMALL-TO-MEDIUM SIZE IN VARYING COLORS OF LOW RATIO TO SAND
M12	LIGHT ROSE COLOR. AGGREGATE: SMALL SIZES IN MEDIUM-TO-DARK COLORS WITH SHARP EDGES
M13	LIGHT GREY-WHITE COLOR. AGGREGATE: FINE SANDS

THE VISUAL ASSESSMENT IDENTIFIED MORTAR TYPES BASED ON THE FIELD OBSERVATIONS ONLY. NO DISTINCTION IS MADE BETWEEN BEDDING AND POINTING MORTARS, AND ASSUMPTIONS HAVE BEEN MADE FOR INCONSISTENT APPEARANCES. THE FOLLOWING STUDIES, WHICH INCLUDED PREVIOUS SAMPLING, ALSO INFORMED THE MORTAR CHARACTERIZATION:

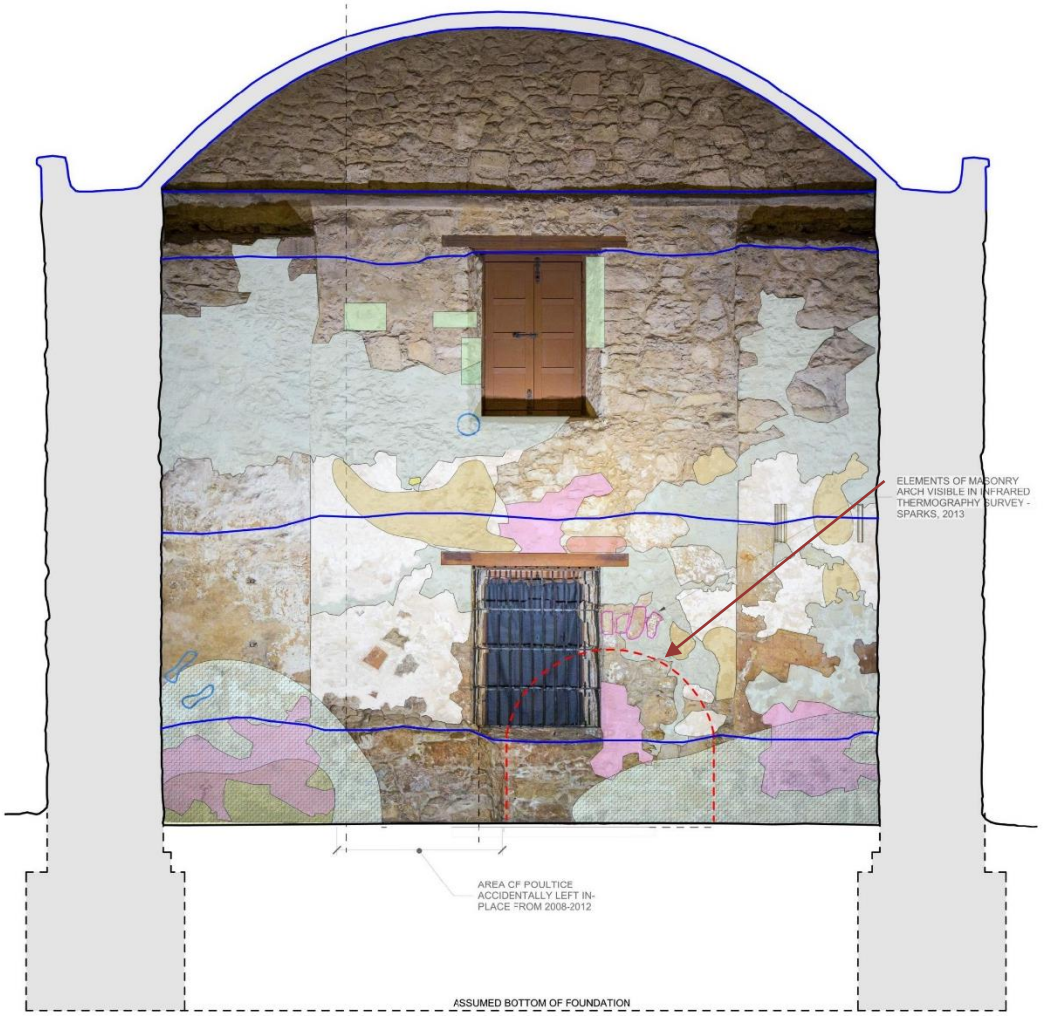
- HUTSON / GALLAGHER, *THE ALAMO CHURCH HISTORIC STRUCTURE REPORT*, DECEMBER 2016. ALAMO CHURCH CONDITIONS ASSESSMENT, GEORGE FORE, CONSERVATOR.
- IVAN MYJER, BUILDING AND MONUMENT CONSERVATION, *ADDENDUM TO ALAMO CHURCH FACADE STABILIZATION REPORT*, MAY 30, 2016.
- PAMELA JARY ROSSER, *CONSERVATION TREATMENTS AND ARCH DISCOVERY DOCUMENTATION*, JANUARY, 2010.
- SPARKS ENGINEERING, INC., *NAVE MORTAR AND PETROGRAPHIC ANALYSIS*, APRIL 27, 2010.
- CAROLYN PETERSON, FORD, POWELL & CARSON, *REPORT ON THE PRESERVATION OF THE ALAMO FACADE FOR THE ALAMO COMMITTE OF DAUGHTERS OF THE REPUBLIC OF TEXAS*, 1998.
- REPAIRS BY ROSS HUNT RESTORATION, MISC. CORRESPONDENCE, 1989.

KEY PLAN: CHURCH



Layers – Testing & Monitoring

Church - Layers



BUILDING CHRONOLOGY DIAGRAM LEGEND

LINETYPE	DESCRIPTION
	AS FOUND BUILDING OUTLINE
	ASSUMED WALL HEIGHT WITH AS-FOUND STONE PROFILE BASED ON 2016 HISTORIC STRUCTURE REPORT NARRATIVE DESCRIPTION
	ASSUMED WALL HEIGHT OR ARCHITECTURAL FEATURE INDICATED IN 2016 ALAMO HISTORIC STRUCTURE REPORT
	ASSUMED EXTENT - HISTORIC CONSTRUCTION REMOVED

KEY - MOISTURE MONITORING

ENVIRONMENTAL MEASURE — # INCHES RELATIVE TO DATUM
I-W-TRH-01.12+
INTERIOR (I) / EXTERIOR (E) / MEDIUM — TEST UNIT

MEDIUM

ABBR.	MEDIUM
A	AIR
S	SOIL
W	WALL

ENVIRONMENTAL MEASURES: SENSORS

SYMBOL	ABBR.	TYPE OF MEASURE	DEPTH
	TRH	TEMP. & REL. HUMIDITY	8" DEEP
	ST	SURFACE TEMP.	1" DEEP
	SR	SOLAR RADIATION	N/A
	AA	AMBIENT AIR	N/A
	MO	MOISTURE	N/A
	TM	TEMPERATURE	N/A

KEY - CORE AND SOIL SAMPLES

INTERIOR (I) / EXTERIOR (E) — # INCHES RELATIVE TO DATUM
I-CR-06-60.5+
TYPE OF SAMPLE — TEST UNIT

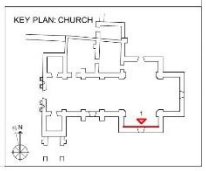
SYMBOL	ABBR.	TYPE OF SAMPLE	DEPTH
	CR	CORE	14" DEEP
	SS	SOIL SAMPLE	SEE NOTES

APPLIED TREATMENTS LEGEND

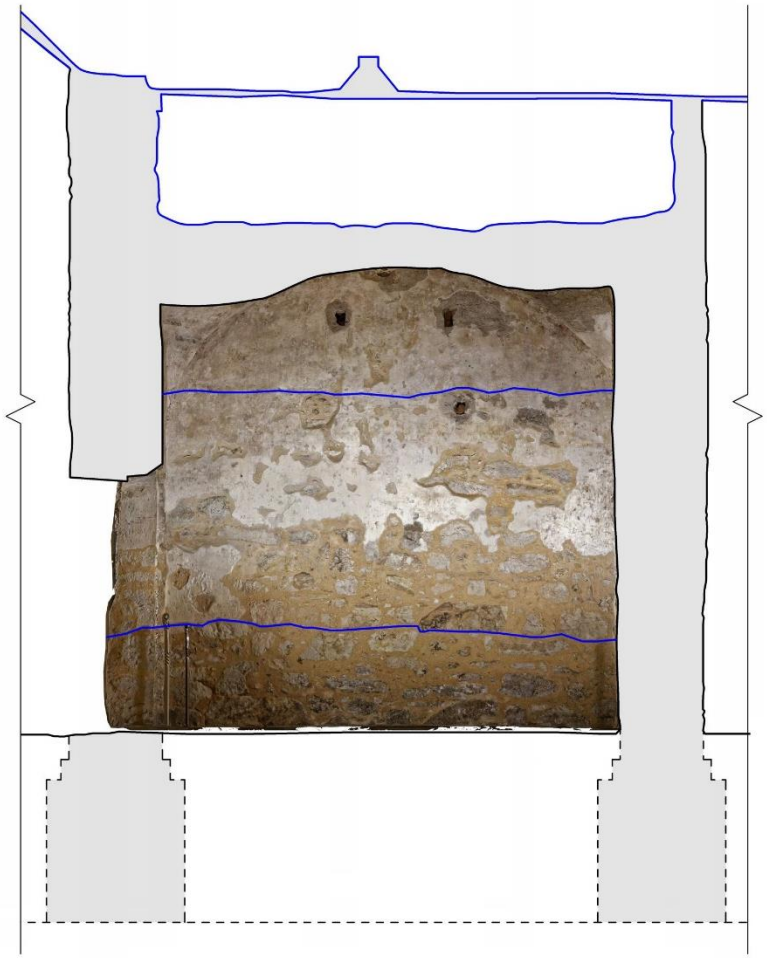
LINETYPE	DESCRIPTION
	LAYER B01: SPANISH COLONIAL PLASTER - INTONACO [FINISH COAT]
	LAYER B02: SPANISH COLONIAL PLASTER - ARRECHIO [ROUGH COAT]
	LAYER B03: INCISED LINES
	LAYER B04: MODERN CEMENT PLASTER PATCHES
	LAYER B05: RECENT PLASTER LOSSES
	LAYER B06: TINTED LIMEWASH: FRESCO BACKGROUND - WARM WHITE/ NEUTRAL
	LAYER B07: TINTED LIMEWASH: IRON OXIDE
	LAYER B08: POLYCHROME PIGMENTED LIMEWASH: LIGHT GREEN (COPPER BASED)
	LAYER B09: POLYCHROME PIGMENTED LIMEWASH: IRON OCHRE YELLOW
	LAYER B10: POLYCHROME PIGMENTED LIMEWASH: VERMILLION RED
	LAYER B11: POLYCHROME PIGMENTED LIMEWASH: BLUE
	LAYER B12: POLYCHROME PIGMENTED LIMEWASH: BLACK
	LAYER B13: POLYCHROME PIGMENTED LIMEWASH: LIGHT GREEN (COPPER GREEN)
	LAYER B15: POLYCHROME PIGMENTED LIMEWASH: PALE PINK
	LAYER B16: INTERIOR UNTINTED LIMEWASH: WHITEWASH LAYERS 1-5
	LAYER B17: INTERIOR TINTED LIMEWASH: BLUISH-GRAY WHITE
	LAYER B18: INTERIOR TINTED LIMEWASH: GRAY
	LAYER B31: COPPER LEAF
	LAYER B32: POLYCHROME LAMPBLACK
	LAYER B33: INCISED GRAFFITI
	LAYER B34: SURFACE CHARCOAL / PAINT / GRAPHITE GRAFFITI
	LAYER C03: LIMITS OF MASONRY CLEANING BY PAM ROSSER, 2003
	LAYER C04: LIMITS OF MASONRY POULTICING
	LAYER C09: LIMIT OF EFFLORESCENCE DOCUMENTED BY CONSERVATOR
	LAYER C10: CONSOLIDATION OF FRIABLE AREAS, VOIDS AND DETACHMENT
	LAYER C11: EDGE STABILIZATION / AQUA SPORCA
	SPANISH COLONIAL WOOD EMBEDMENT
	NEWER WOOD EMBEDMENT [DATE PENDING REPORT]
	SENSITIVE WALL AREA BEYOND
	SPANISH COLONIAL FRESCO

AREAS DELINEATED CONTAIN EVIDENCE OF FINISH FRAGMENTS.

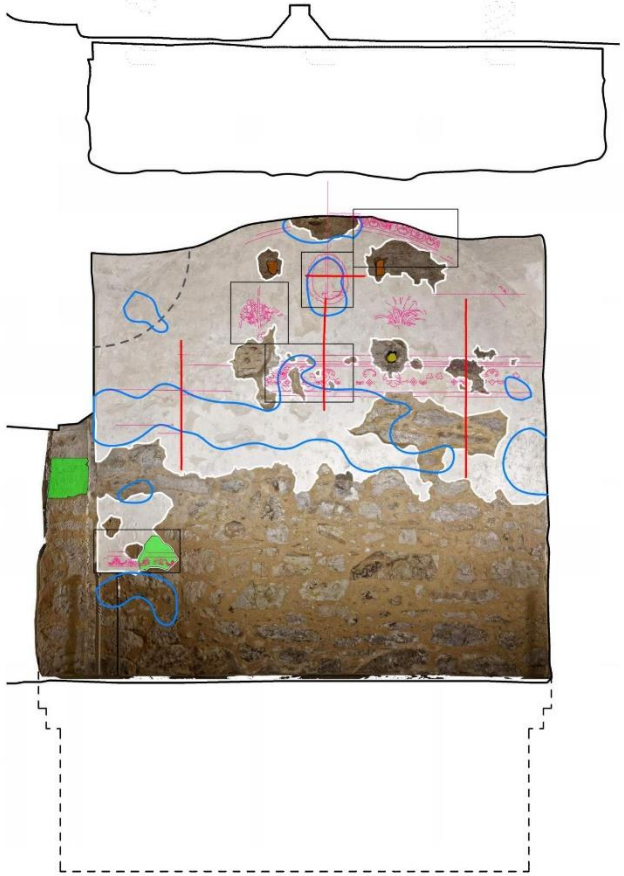
KEY PLAN: CHURCH



Sacristy – Building Evolution



Sacristy – Applied Finishes



The Alamo

NOVEMBER 19, 2019

ALAMO CITIZENS ADVISORY COMMITTEE

Imagine a world class historic site
that tells the whole story of the Alamo.

FORUM
ROME, ITALY

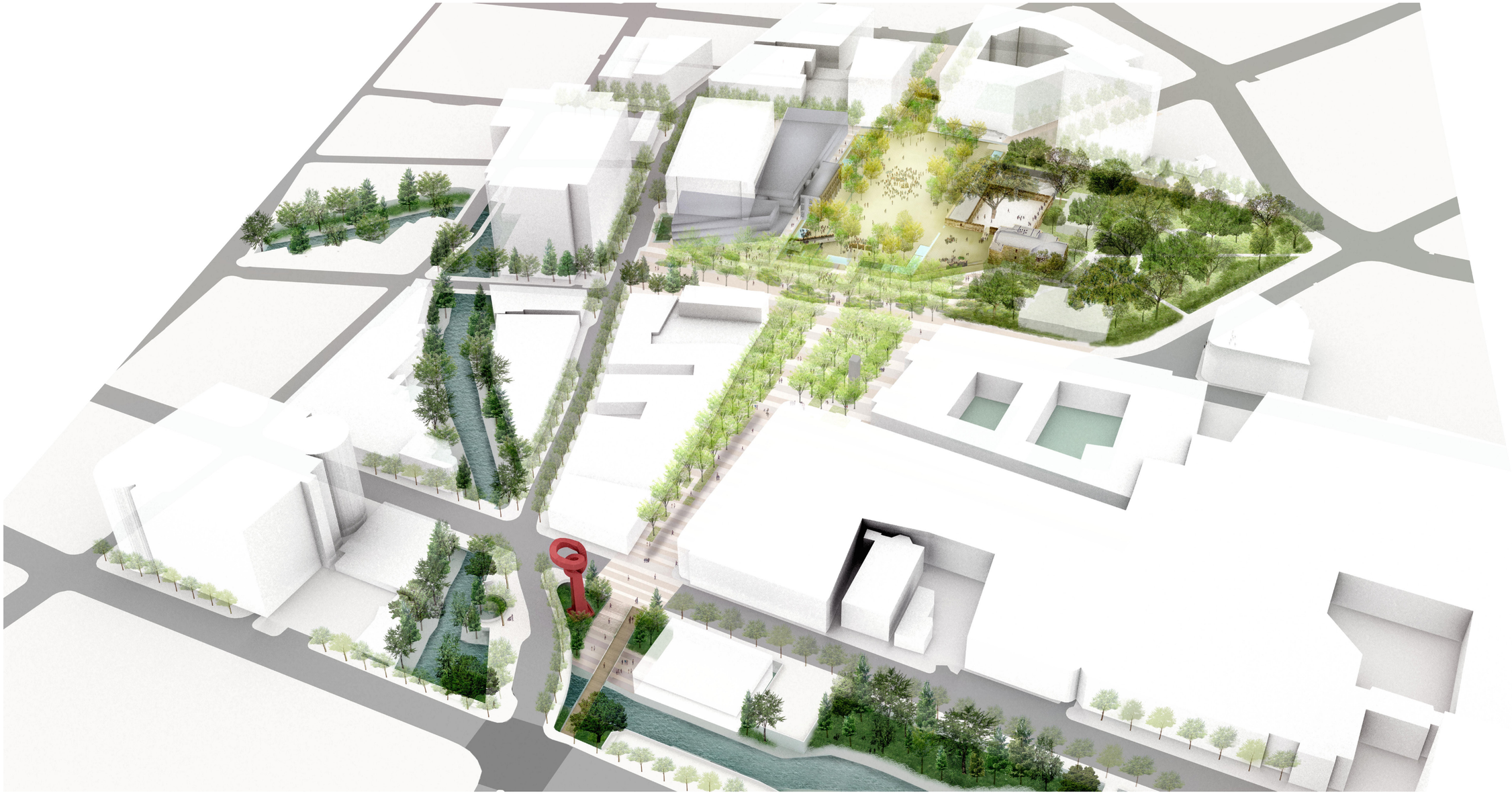
TUMACACORI NATIONAL HISTORIC SITE
SANTA CRUZ COUNTY, ARIZONA

TUMACACORI NATIONAL HISTORIC SITE
SANTA CRUZ COUNTY, ARIZONA

BLOOD SWEPT LANDS AND SEAS OF RED
TOWER OF LONDON, ENGLAND

FIESTA CELEBRATION
SAN ANTONIO, TEXAS

INTERPRETIVE PLAN

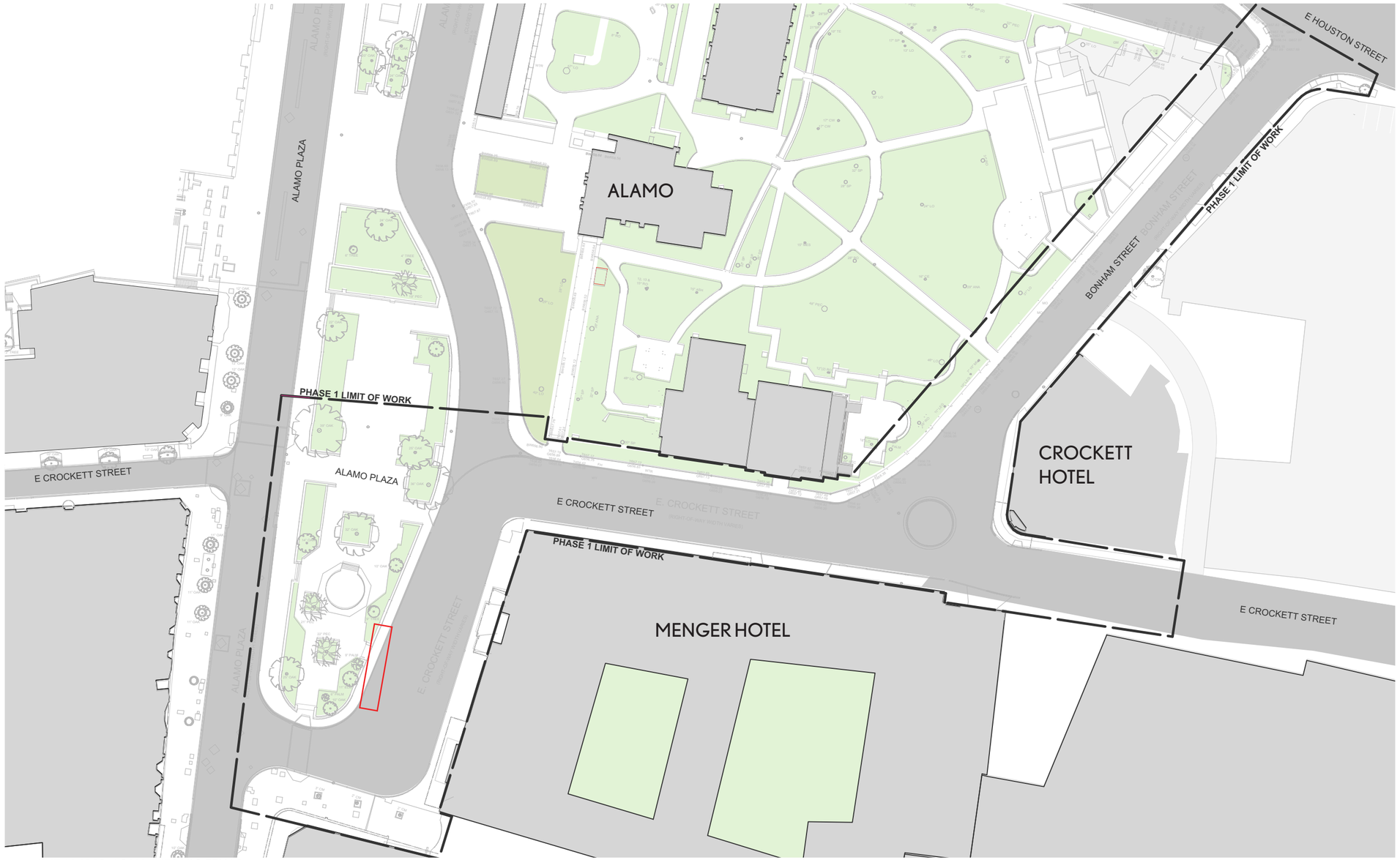


CENOTAPH RELOCATION

Interpretive Plan

ALAMO PLAZA

Phase 1 Scope Boundary

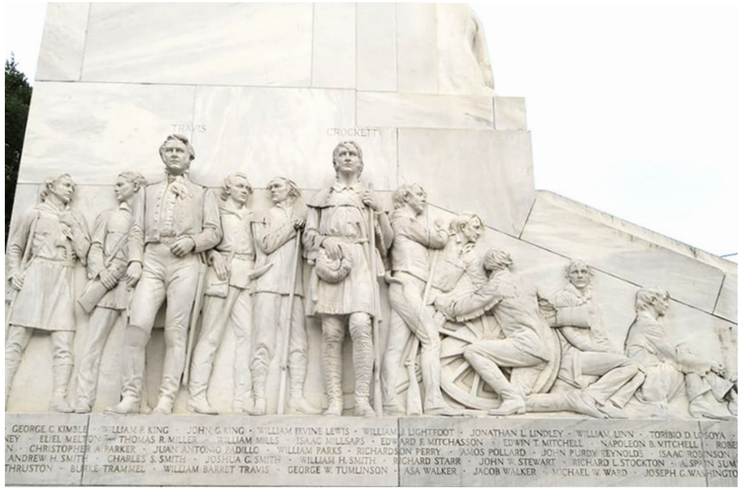


ALAMO PLAZA

Phase 1 Scope Boundary

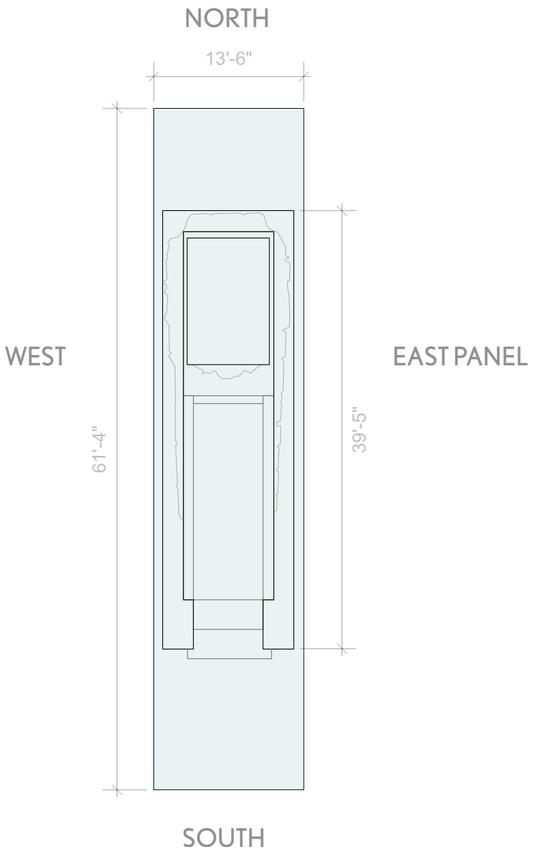
ALAMO CENOTAPH ORIGINS

Design intent



"WILLIAM BARRET TRAVIS, COMMANDER OF THE ALAMO GARRISON, AND DAVY CROCKETT, AS THE CENTRAL FIGURES"

"THE FIGURE OF TEXAS, HOLDING THE SHIELDS OF THE LONE STAR STATE AND OF THE UNITED STATES, INDICATIVE OF THE UNION BETWEEN THE TWO"



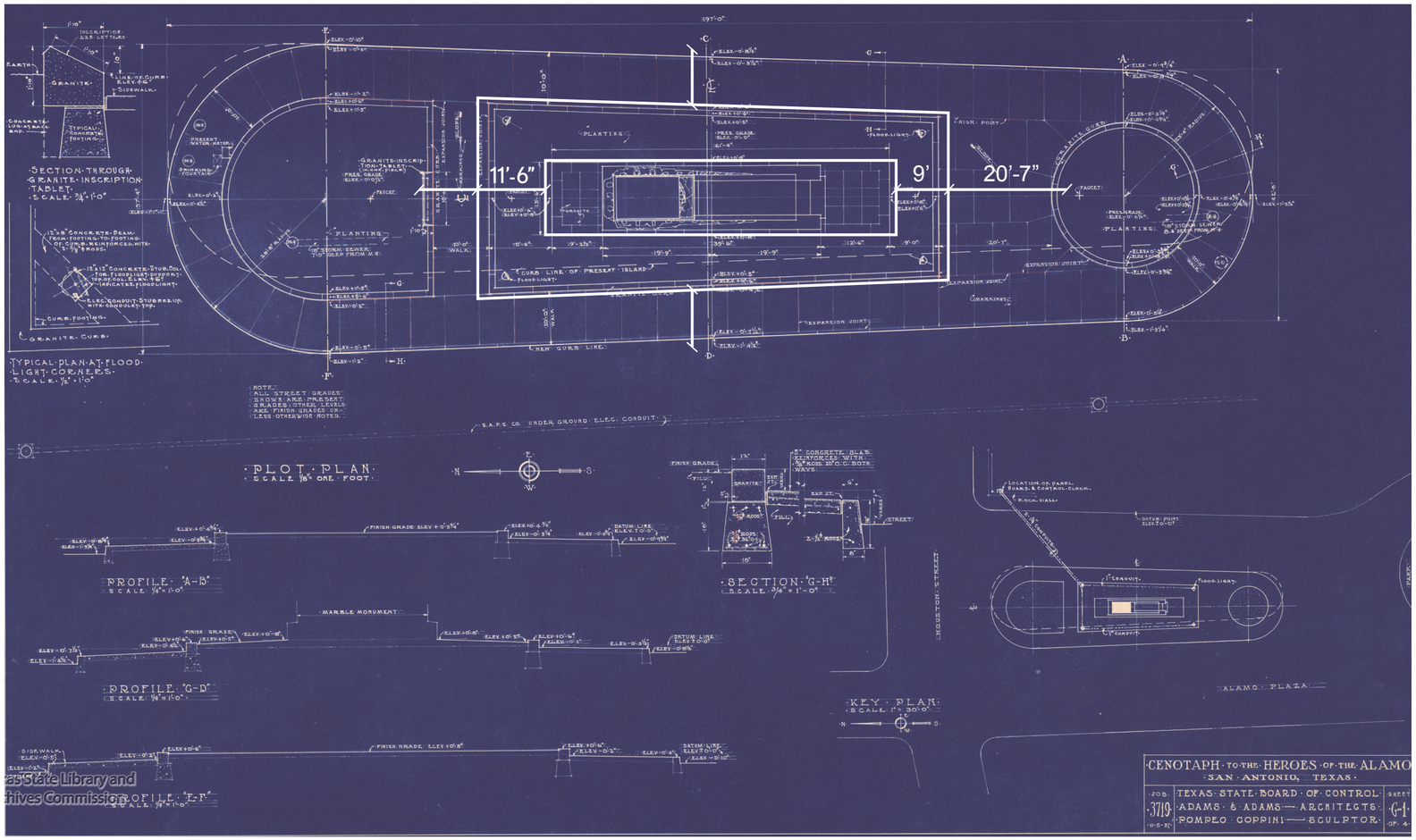
"SPIRIT OF SACRIFICE RISING FROM THE SHROUDED FIGURES OF THE ALAMO DEAD"

"FROM THE FIRE THAT BURNED THEIR BODIES ROSE THE ETERNAL SPIRIT OF SUBLIME, HEROIC SACRIFICE WHICH GAVE BIRTH TO AN EMPIRE STATE"

"JAMES BOWIE AND JAMES BONHAM IN FULL RELIEF AGAINST A BACKROUND OF UNNAMED HEROES OF THE ALAMO WITH A CANNON, JUST BEFORE THE FALL OF THE FORT "

CENOTAPH ORIGINS

Viewing distances & Orientation



ALAMO CENOTAPH ORIGINS

Design intent

CENOTAPH POSTCARD - 1940's

CENOTAPH POSTCARD - 1970's

ALAMO PLAZA

Aerial View Today

ALAMO PLAZA

Aerial View Today

CENOTAPH RELOCATION

Existing Live Oaks

ALAMO PLAZA

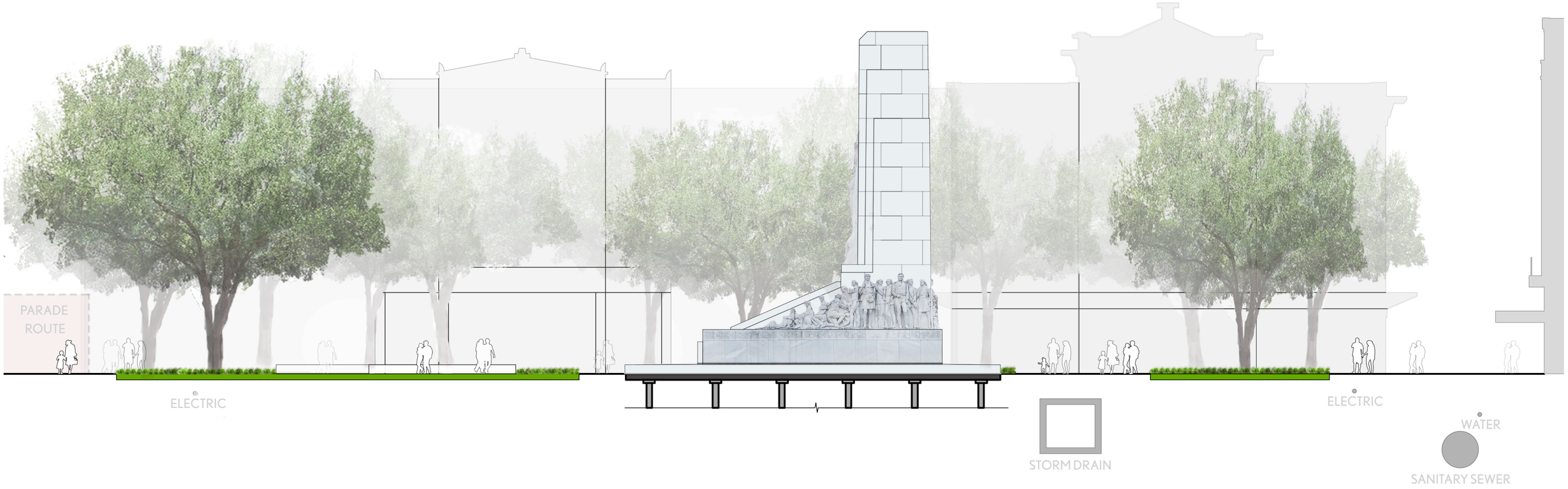
Cenotaph Location

ALAMO PLAZA

Cenotaph Location Constraints

ALAMO PLAZA
Section

ALAMO PLAZA
Longitudinal Section



ALAMO PLAZA

View from North

ALAMO PLAZA

View from South

ALAMO PLAZA

View from South

ALAMO PLAZA

View from North

ALAMO PLAZA
Precedents

PULASKI MONUMENT, SAVANNAH , GA

JOHN PAUL JONES MEMORIAL - WASHINGTON, DC

UNIVERISTY OF TEXAS AT AUSTIN SPEEDWAY MALL - AUSTIN, TX

CENOTAPH

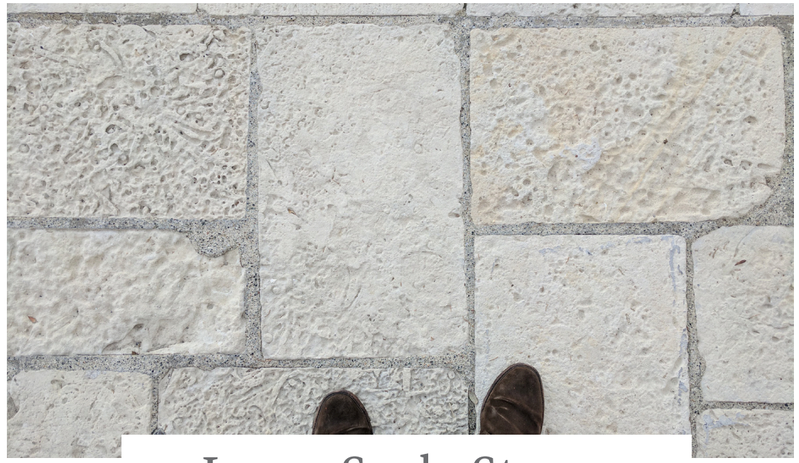
Proposed Aerial View

ALAMO PLAZA
Materials Approach

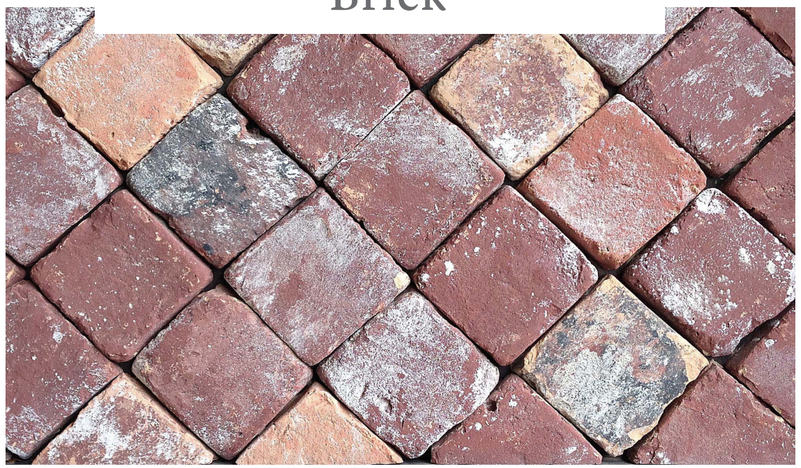
Traditional materials
Regional hues
Timeless geometries
Pattern to define movement and space

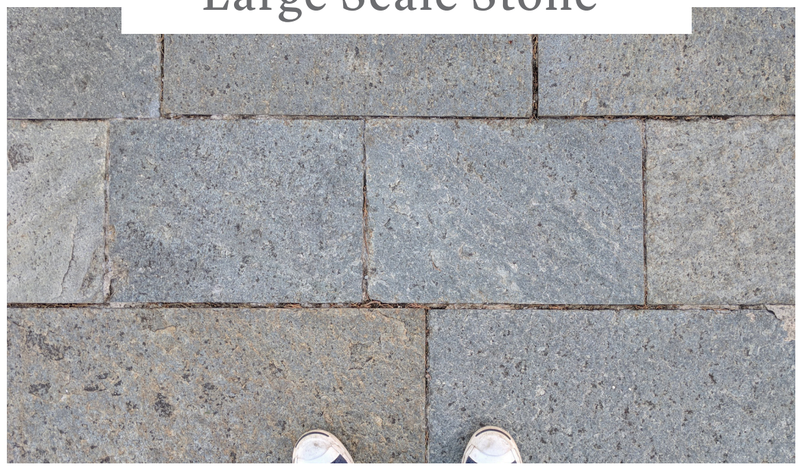
Brick

Small Scale Stone



Large Scale Stone





ALAMO PLAZA
Materials Approach

Monolithic Benches

Edges

Planting

ALAMO PLAZA
Lighting Approach

ALAMO PLAZA
Lighting Approach

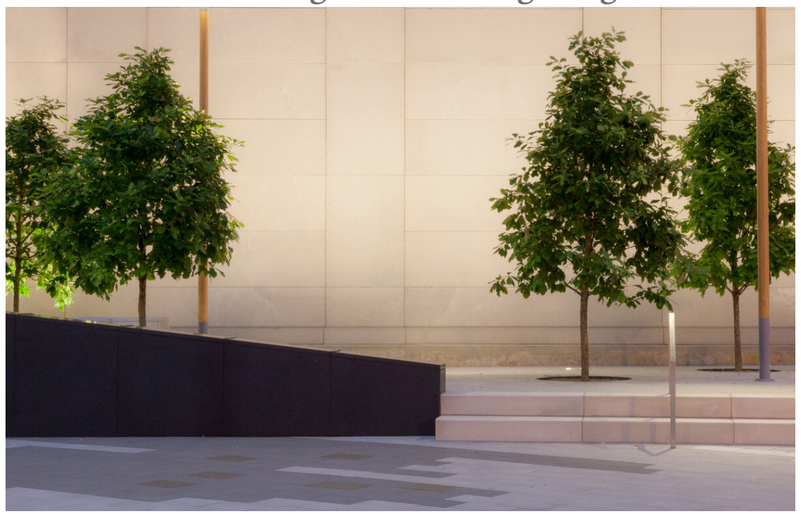
Enable Continuity
Surface Lighting

Highlight Monuments & Historic Elements
Tall Light Masts with Spots

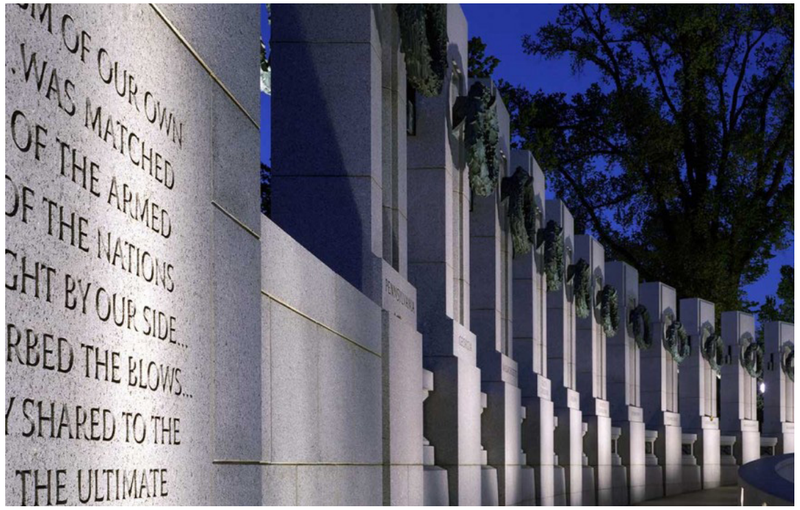
Animate the Groundplane
Washing + Downlighting

ALAMO PLAZA
Lighting Approach

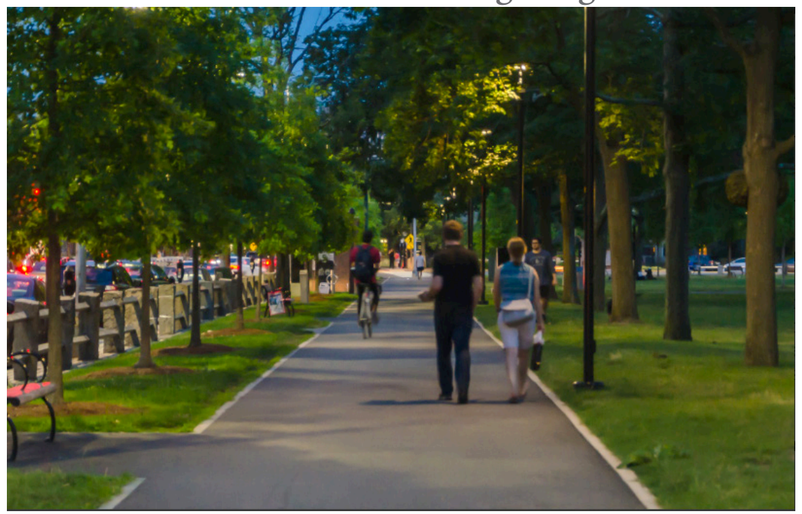
Animate the Groundplane
Washing and Downlighting

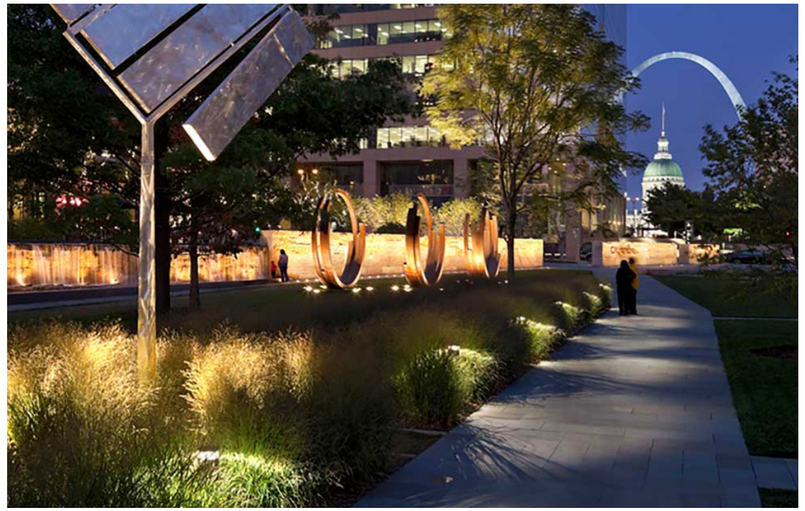


Highlight Monuments & Historic Elements
Tall Light Masts with Spots



Enable Continuity
Street and Path Lighting



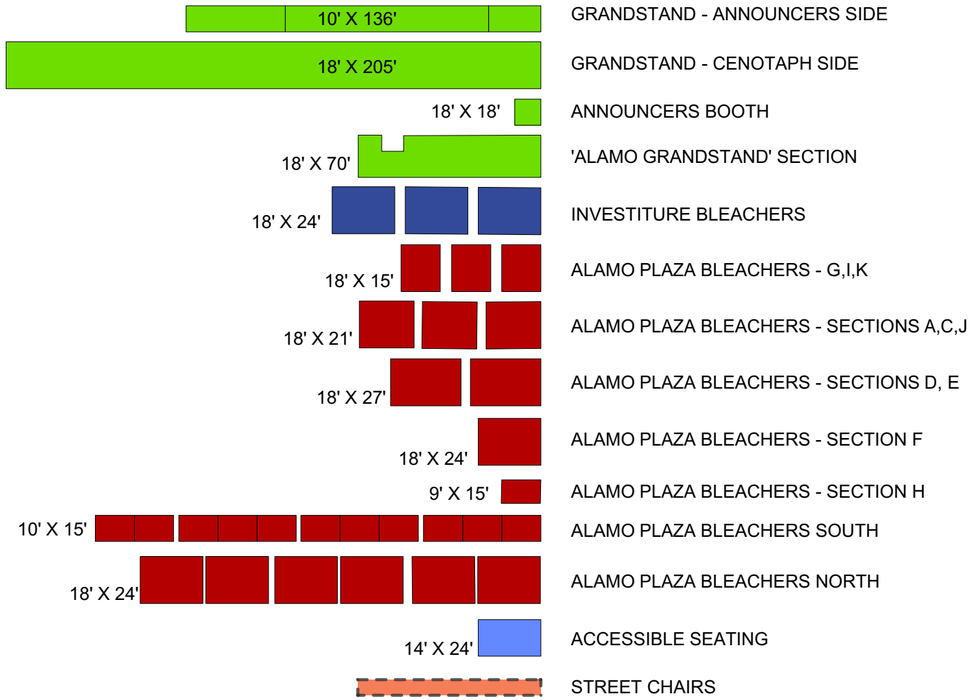


REED HILDERBRAND

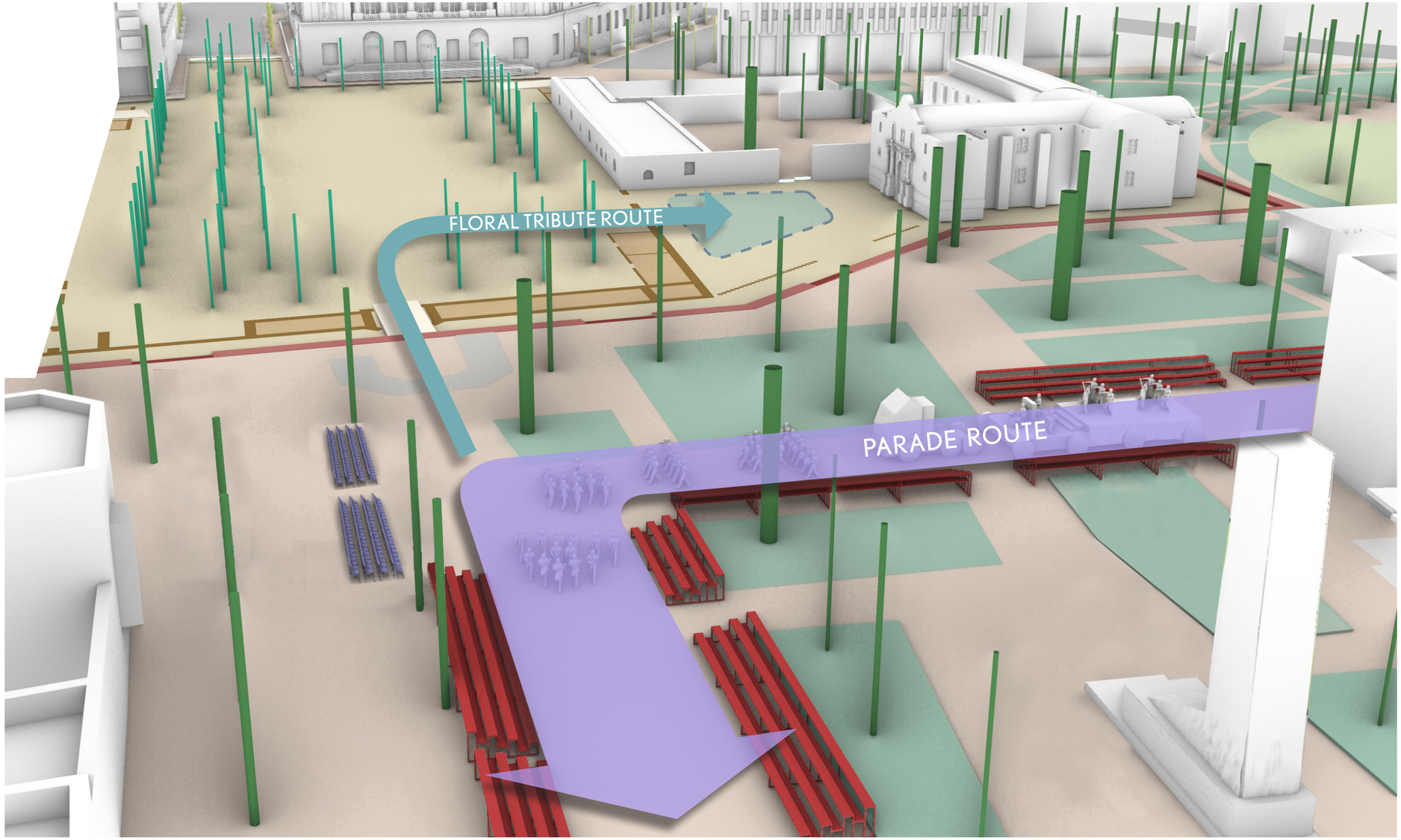
THE ALAMO / SAN ANTONIO TEXAS

SITE DESIGN

ALAMO PLAZA
Parade Route

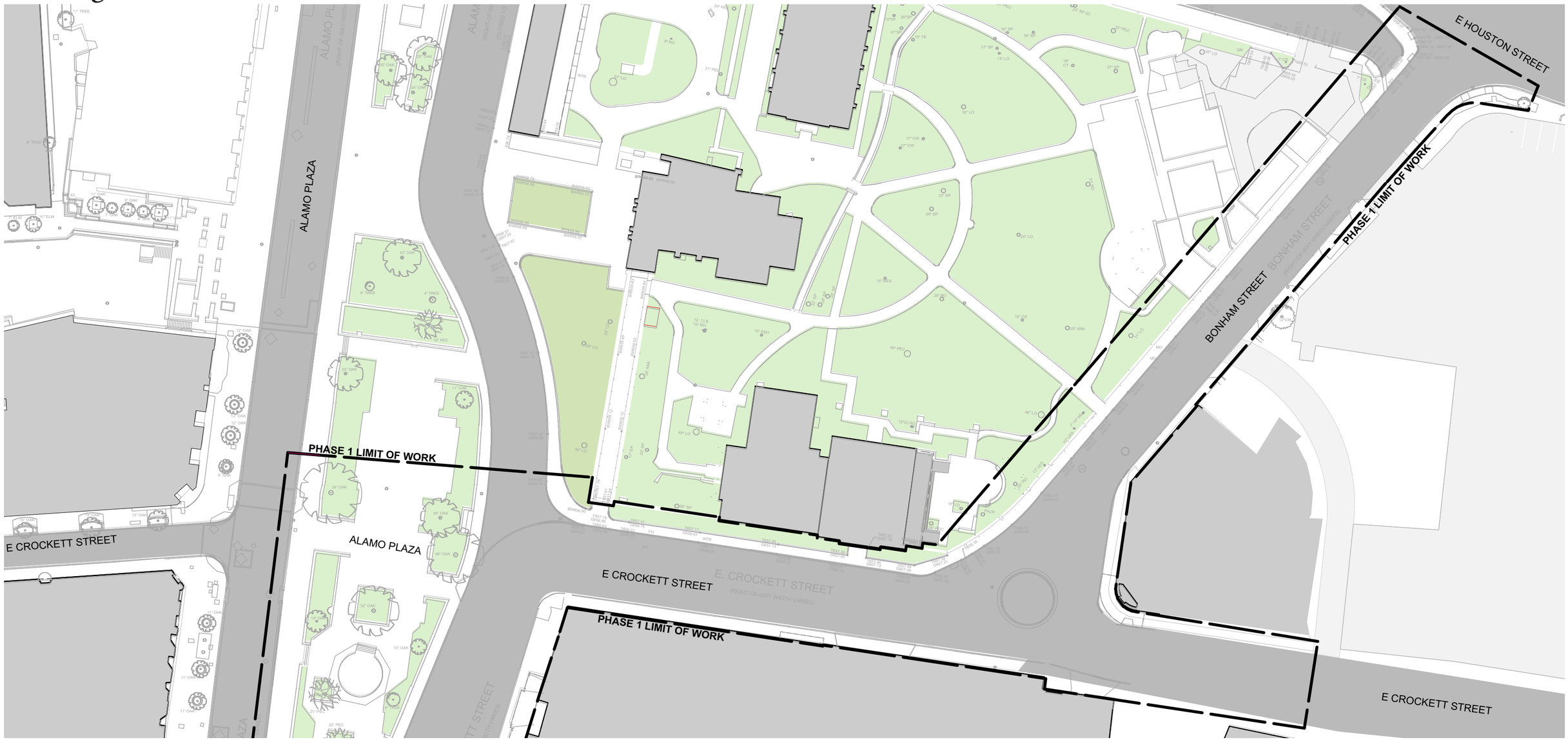


ALAMO PLAZA
Ceremonial Zone



BONHAM STREET

Existing Conditions



BONHAM STREET

Plaza Extension

BONHAM STREET

Section

ALAMO PLAZA

Plaza Extension

ALAMO PLAZA

Plaza Extension

ALAMO PLAZA

Plaza Extension

ALAMO PLAZA

Phase 1 Aerial View

ALAMO PLAZA

Long-Term Plan

ALAMO PLAZA

Long-Term Plan

ALAMO PLAZA

Phase 1 Scope Boundary

END

TREE CANOPY

Size at Time of Planting

NATIONAL SEPTEMBER 11TH MEMORIAL & MUSEUM, NEW YORK CITY

November 2019

Cenotaph Restoration

Alamo Trust + HKS Architects + CVM

CVM Overview

CVM is a multi-faceted company that includes engineers, architects and scientists

Integration of disciplines

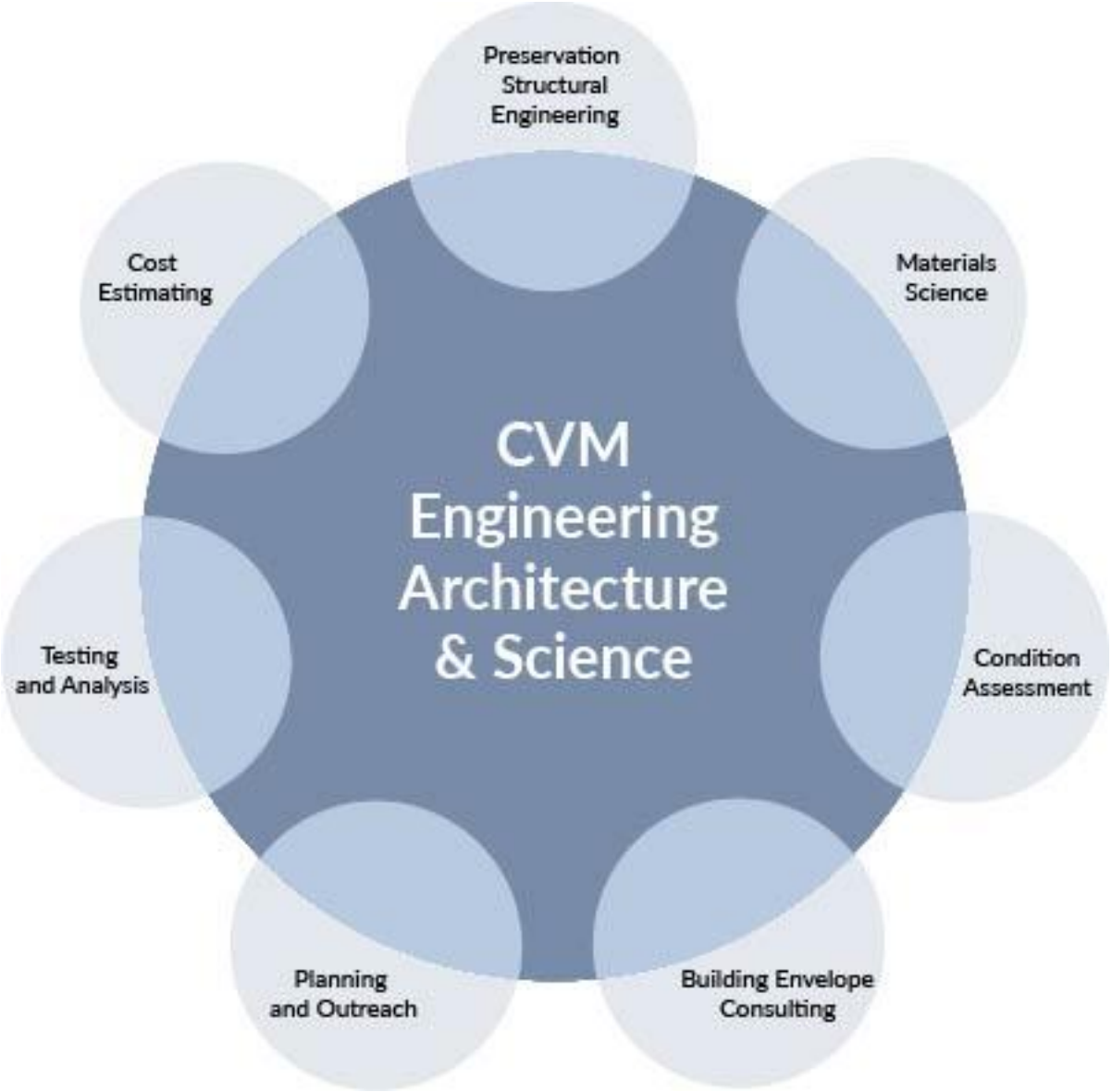
Process-driven

Broad and deep

Collective experience

Analysis, thought, design

Economically responsible



CVM Capabilities

Historic Preservation

Materials Science & Conservation

Testing & Analysis

New Design & Structural Rehabilitation

Dilworth Plaza Philadelphia

Historic Place

Multiple teams

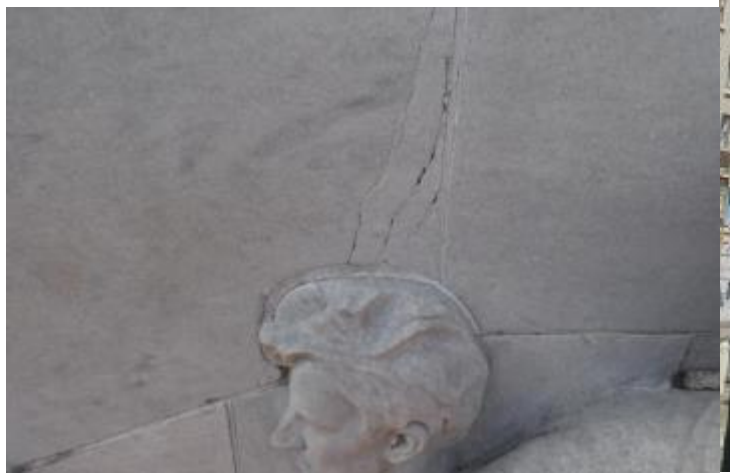
Public site

What is the Cenotaph physically?

Stone Elements

Carved Stone

Concrete Superstructure

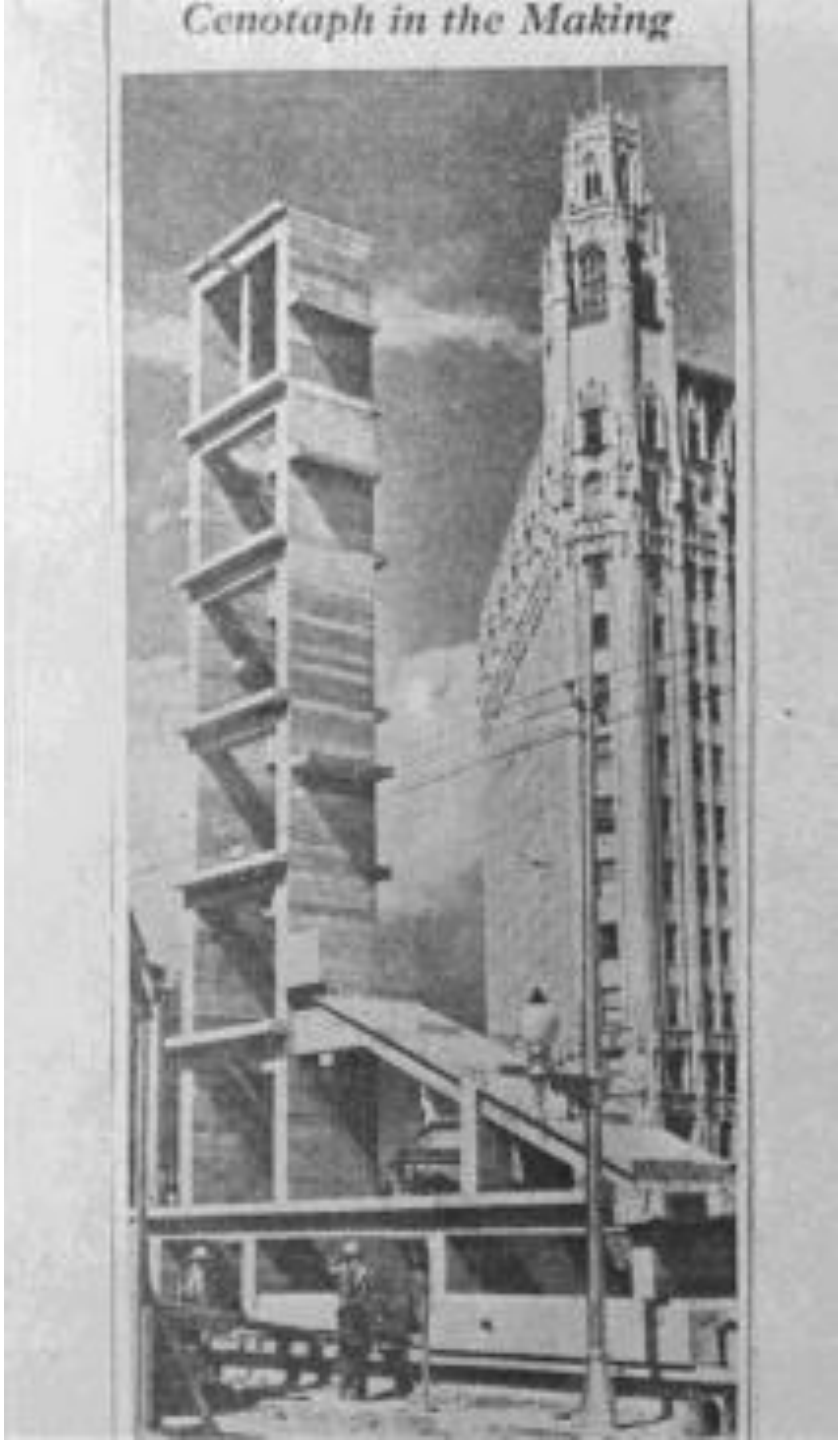


What is the Cenotaph physically?

Stone Elements

Carved Stone

Concrete Superstructure

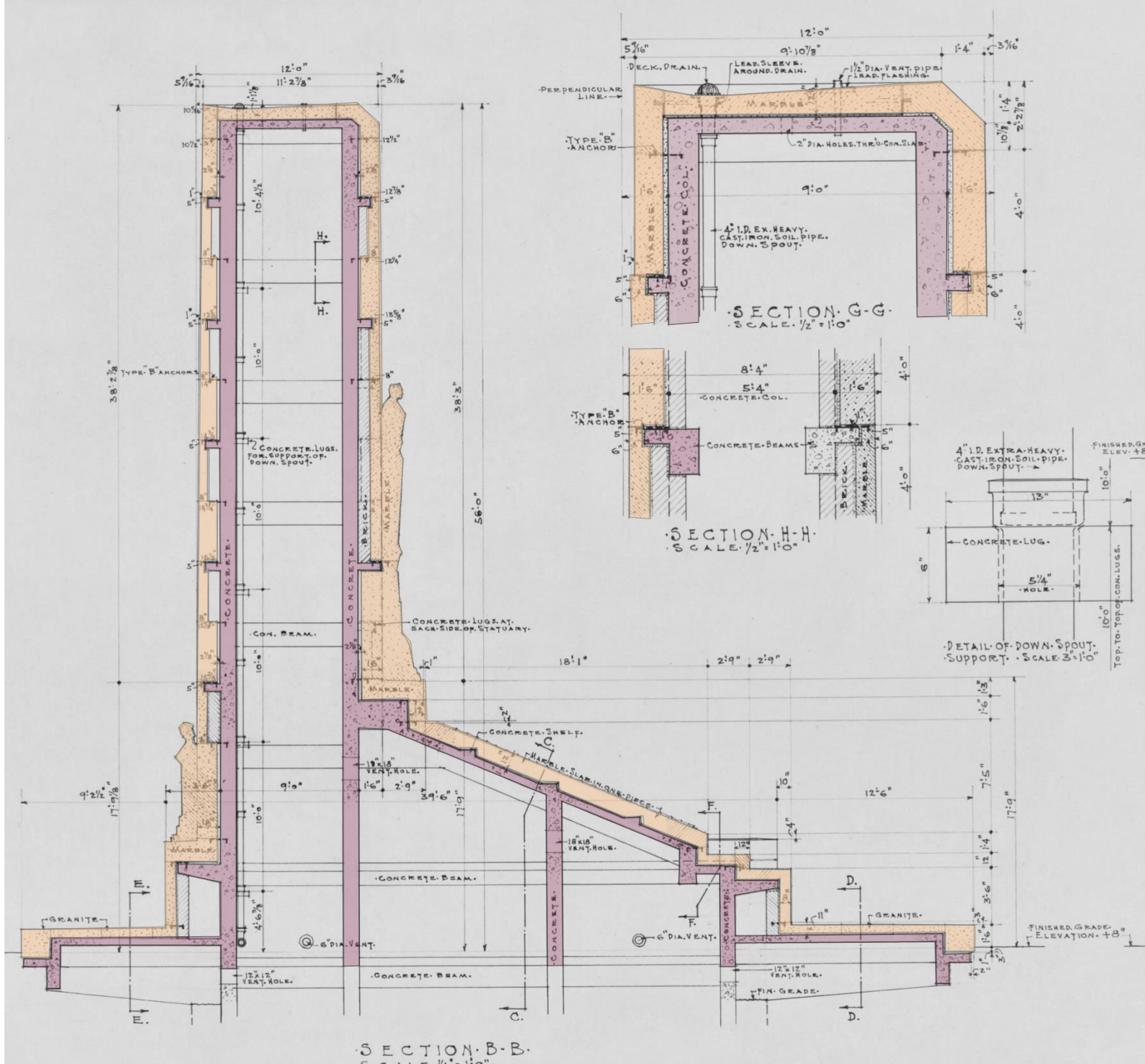


What is the Cenotaph physically?

Stone Elements

Carved Stone

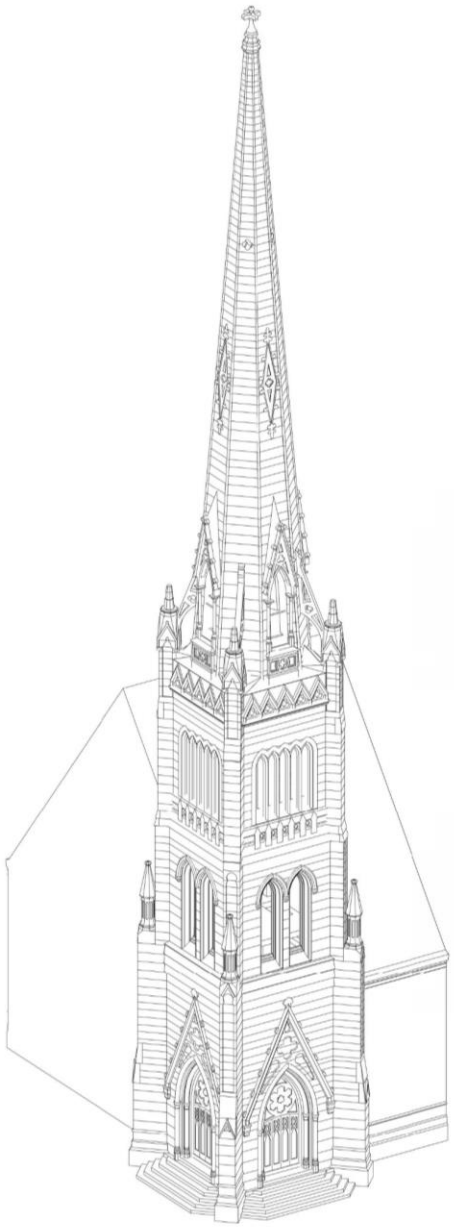
Concrete Superstructure

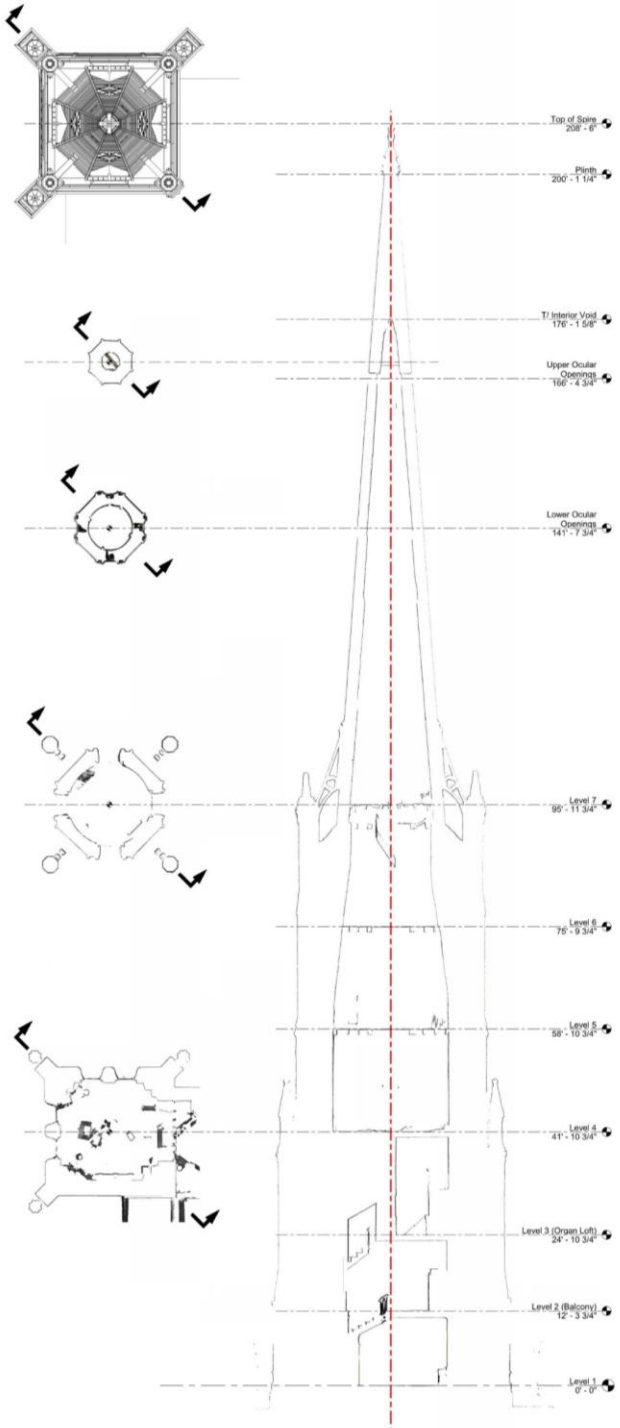


Arch Street Methodist

1860s - Gothic revival masonry

Laser Scan, Point Cloud, Modeling & Analyses





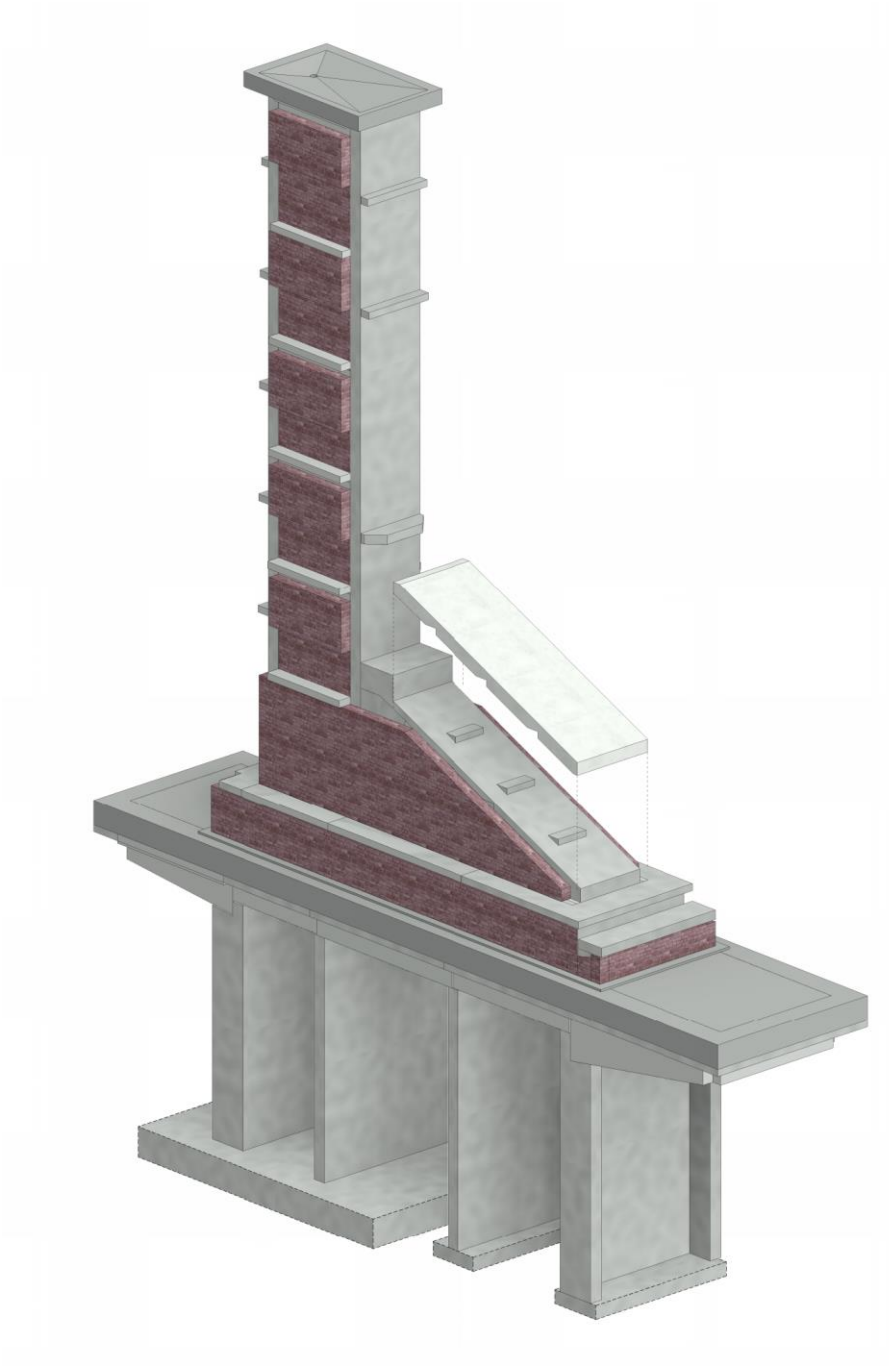
Arch Street Methodist

1860s - Gothic revival masonry

Laser Scan, Point Cloud & Drones

Modeling the Cenotaph

REVIT model
Existing drawings
Modified following 3D Scan

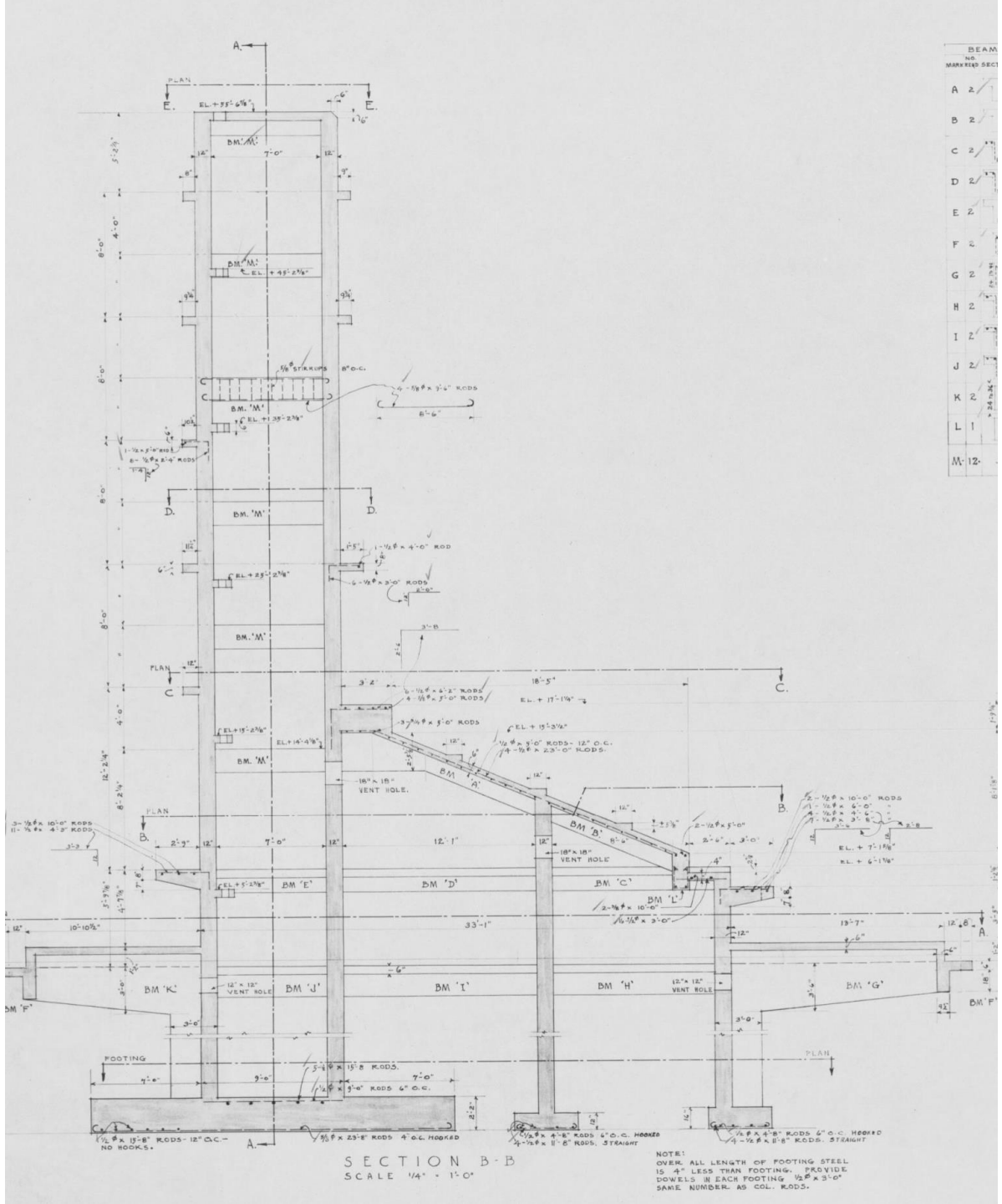


Why do we have to take it apart?

Rigging Challenges

Why conserve on site and in public?

Why a new superstructure?



CVM

Thank you

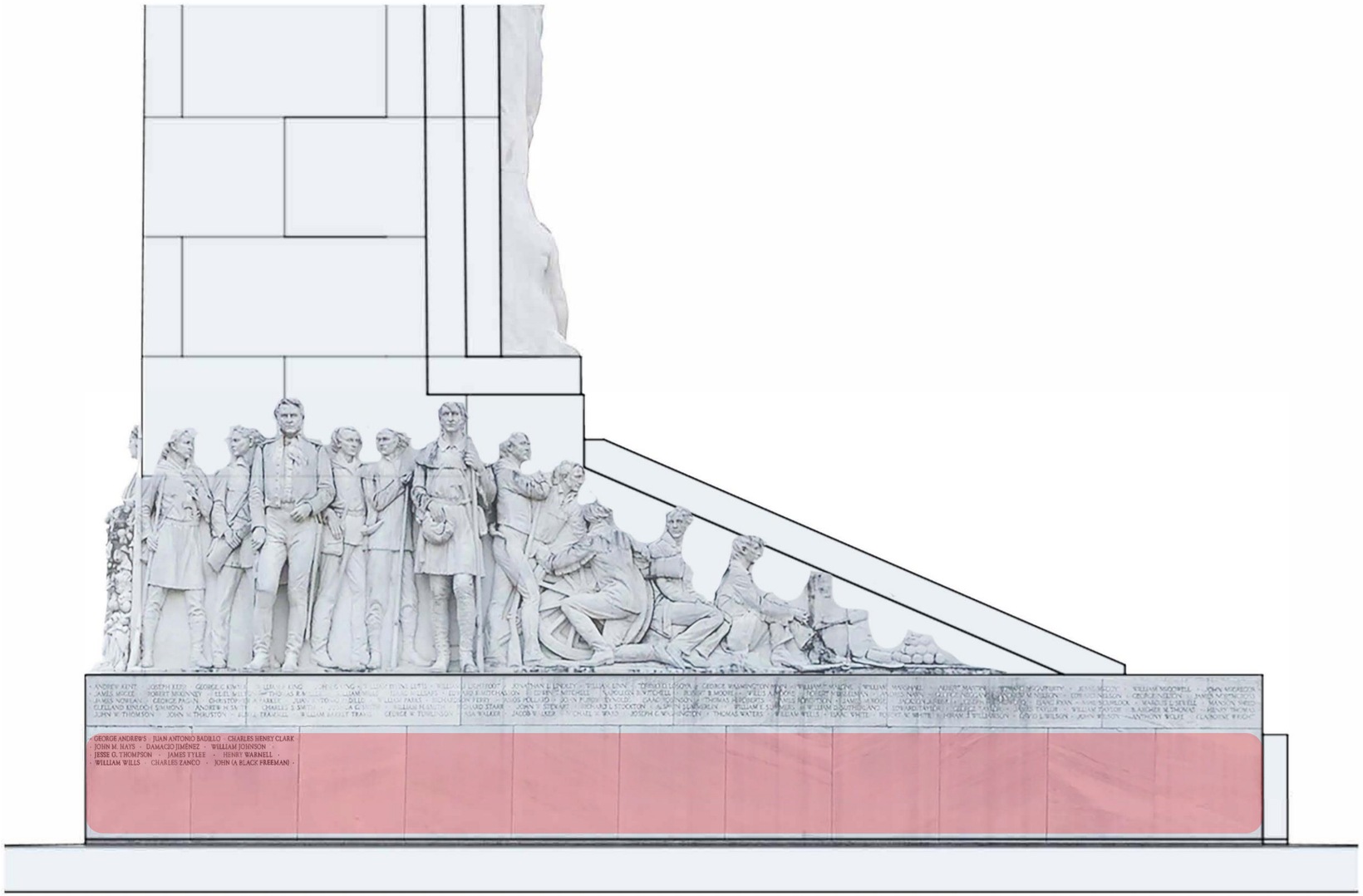
CENOTAPH INTERPRETATION

Interpretive Signage

1. Cenotaph Additional Names
2. Phase I = Cenotaph Interpretive Strategy and Content
3. Future Phases = Civic Plaza Interpretive Strategy and Content

CENOTAPH INTERPRETATION

Alamo Defenders - Additional Names



- No revisions to existing sculptures
- Add names to marble base
- Supplemental interpretive panels?
- Final design TBD

CENOTAPH INTERPRETATION

Interpretive Signage

Interpretive Buckets

The Defenders
People continue to research the Alamo, and they occasionally discover the names of previously un- known defenders.

Artistry
The Cenotaph is memorial art. Explore the people that made the Cenotaph, and the messages they wanted to convey.

Content Summary

Panel 1

The first panel's text explains the Cenotaph's list of Defenders and the research that went into verifying their identity, including Dr. Amelia William's work.

Panel 2

This interpretive describes Pompeo Coppini and Waldine Tauch's role in creating the Cenotaph while examining the sculptural elements they created.

Panel 3

The final panel examines the work of Charleton Adams and Frank Drought while exploring the decisions they made to create a cenotaph, rather than another style of memorial.

CENOTAPH INTERPRETATION

Interpretive Signage

Location 1

Location 2

Location 3

CENOTAPH INTERPRETATION

Interpretive Content

Cenotaph Interpretation = Phase 1

Additional Alamo Interpretation within Civic Plaza = Phase 2

- Journey to the Alamo – South Gate
- Santa Anna Troop Positions
- El Camino Real
- Other ???